DOCUMENT RESUME

ED 085 012 HE 004 906

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TITLE Analysis of Student Questionnaire 1971.
PUB DATE [71]
NOTE 106p.

EDRS PRICE MF-$0.65 HC-$6.58
DESCRIPTORS *College Students; *Higher Education; *Negro Education; *Negroes; Questionnaires; Research Projects; Statistical Data; Student Attitudes; *Student Characteristics
IDENTIFIERS TCCP; *Thirteen College Curriculum Program

ABSTRACT

This report presents a comprehensive description of seniors graduating from a broad cross-section of colleges, both public and private, with predominantly black student enrollment. Results of a questionnaire administered to seniors enrolled during their freshman and sopomore years in an innovative curriculum program (Thirteen-College Curriculum Program) and seniors who experienced the traditional curriculum during all four years of college indicated: (1) the seniors tended to be first-generation college graduates, the majority of whose parents had not completed high school. (2) Limited financial backing was a constant factor in the probability of students reaching graduation. (3) Seniors who had their initial college experience in the TCCP had higher grade-point averages than did seniors who did not have such initial experiences. (4) Across all students, the greatest degree of nonacademic participation was in two areas--student government and community service. (5) While 80% of the seniors indicated they would pursue at least one degree beyond the bachelor's, only 20% were actively making application to graduate school. (6) While majors such as education and religion have had traditionally heavy enrollments at these colleges, among these seniors a larger number majored in business and science. (7) 50% of the seniors professed ambivalent feelings about the personal satisfaction gained from attending their particular college. Additional findings, study procedures, and statistical data are included. (MJM)

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ED 085012

Analysis of

Student Questionnaire 1971

by

J. Thomas Permeter

HE 004 906

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Overview and Selected Findings

The following report presents a comprehensive description of seniors graduating from a broad cross-section of colleges, both public and private, with predominantly black student enrollment. The students in the study were representative of different groups of seniors present on each of the thirteen participating campuses: 1) seniors enrolled during their freshman and sophomore years in an innovative curriculum program (a part of the Thirteen-College Curriculum Program, herein referred to as the TCCP); and 2) seniors enrolled from the outset of their college years in the curriculum traditional at their particular college. This latter group was itself composed of two groups: 1) a group which was comparable in size to the group in the innovative curriculum, and which had served as a "control" group for the TCCP in a longitudinal study throughout the college years; and 2) a much larger group of seniors on whom no previous data had been gathered, but which provided an estimate of the representativeness of the smaller "control" group. Combined, the group of 2448 seniors represented about fifty percent of the total number of seniors approaching graduation in the Spring, 1971, on the thirteen college campuses.

Following a discussion of the issues and problems in colleges and universities with predominantly black enrollment, the report describes the questionnaire and procedures used in the study, and then presents in detail the composite picture of the graduating seniors derived from results, ending with the presentation of the data in tabular form. The composite description of the seniors has as its basis three major areas

of student responses. Responses in the first of these areas provide a description of the students' backgrounds and performance, both prior to and during their college years. The second area provides a description of the seniors' attitudes toward and judgments of college life in general, and their experiences under specific academic conditions. The third area provides a description of the seniors' views of themselves in relation to their milieu, and their perspectives of their role in contributing to change in higher education.

In the body of the report, the findings in each area are first presented as a composite picture, followed by a discussion of the comparative differences between the three previously identified groups of seniors. The following selected findings are major themes derived from these areas:

-- The seniors tended to be first-generation college graduates, the majority of whose parents had not completed high school. 90 percent of the students were from southern black families whose median income was half that of the average college student's family. For TCCP students, these factors were heightened, with even lower income (1/3 under $3,000) and lower education level.

-- Limited financial backing was a constant factor in the probability of students reaching graduation. Many families evidenced determination to have their child continue, 50 percent of the families contributing half the student's financial support. However, nearly all students attended college in their home state, and at schools where the cost was less expensive. Scholarships and loan money were restricted by limited endowments and low state and federal funds for black universities. Two-thirds of the students worked throughout their senior year, the number limited by restricted job opportunities in the local communities.

-- As a group, seniors who had had their initial college experience in the TCCP had higher grade-point averages than did seniors who did not have such initial experiences. While women had, as a group, higher gradepoints than did men among the non-TCCP students, more males held the higher positions among TCCP students.

-- Across all students, the greatest degree of non-academic participation was in two areas -- student government and community service -- with 1/3 of the students having participated in each of these areas. TCCP students were distinguishable from non-TCCP's by the greater extent of their participation. What participation there was is specialized areas such as writing and drama was mainly confined to former TCCP students, these experiences being reminiscent of such in-class activities during their freshman-sophomore years.

-- While 80 percent of the seniors indicated they would pursue at least one degree beyond the bachelor's, only 20 percent were actively making application to graduate school, the majority of students having immediate plans of getting employment. A greater number of TCCP students were making application for graduate school.

-- While majors such as education and religion have had traditionally heavy enrollments at these colleges, among these seniors increased number majored in business and science. By comparison with the non-TCCP students, there were fewer TCCP education majors, but more majors in medicine, law, the arts, and humanities.

-- 50 percent of the seniors professed ambivalent feelings about the personal satisfaction gained from attending their particular college. The consensus was that it had helped them achieve personal goals, but they were unsure that they would attend the same school, were they to begin again.

-- This same ambivalence was reflected in the non-TCCP seniors' recollections of their freshman year. While they saw it as a positive contributor to their personal growth, such as confirming their ability to do college work and improving their study skills, 66 percent felt the year was rigid and impersonal; 75 percent would not have had the rest of their college experience be like that. The former TCCP students had a more positive view of the freshman year, not only in its contribution to personal growth, but also as a model for other years.

-- As seniors, the TCCP students exhibited significant differences in perceptions of classroom instruction diring their freshman year, when compared with perceptions of non-TCCP seniors. The TCCP students felt the faculty actually had tried out different approaches and materials, had tried to relate instruction to the students' frames of reference, had used an interactive, student-oriented teaching style, and had encouraged students to contribute to the success of the class by exchanging views with their peers.

-- TCCP students interpreted their later college experiences in the regular curriculum as less positive than did the non-TCCP students who had not initially experienced the innovative program.

-- Counseling services are fairly recent editions to many black campuses and in many instances are not yet an integrative part of the average student's life. This was reflected among non-TCCP students, with less than 50 percent ever having seen a counselor about any concern. The TCCP program included the counseling service as an important fuction, and as a consequence more than 56 percent of the seniors had at some time seen a counselor about personal problems, 69 percent had seen one for financial problems, and 52 percent had taken part in small-group sessions.

-- The seniors felt that they should have been given greater responsibility for the structure of their education and the conduct of their college lives. 84 percent felt they should be allowed to participate more in decision-making in such areas as course content and the evaluation of faculty, and that they should have control of their off-campus lives. 69 percent believed that what colleges mostly did was to improve one's income. TCCP students differed in degree rather than in kind with the seniors in general. While feeling more strongly about an issue such as control of their off-campus lives, the TCCP's were less extreme in their view that the college served mostly to improve one's income, rather stressing the intrinsic value of the experience.

-- Part of the attitudes of the seniors are endemic to the times and circumstances -- a crossroads for young Blacks -- and part of their attitudes reflect common symptoms of college students -- the tendencies to debunk and to show ambivalence and incongruities in attitudes. For example, 75 percent felt their education was a good as that of whites, but fewer were sure it better fitted their needs than that received at a white institution. The majority

felt that more of the college experience should focus on the black experience, but 80 percent felt black colleges should perpare students for jobs so they could work for change within the American system. The majority felt that colleges should be integrated, but also felt that Blacks should attend black colleges. TCCP students differed from these views only in the degree to which they were held, such as being more supportive of black college attendance.

-- As they approached graduation, the seniors were confident that they would graduate, had confidence in their ability to learn, still believed hard work paid off and that despite disadvantages they would succeed, based on a confidence in their capability to deal with situations they would encounter. The TCCP students felt most positive about this relationship with their environment.

-- As might be expected, the students generally desired a greater role in college governance and decision-making than they felt they actually had. Only in the area of student discipline did the desired role show any significant actual match with real student involvement. As far as involvement in determination of academic content, in decisions about faculty promotion, admission, and graduation requirements, these seniors felt they had had only informal consultation or virtually no role. Three points must be made. First, many students agreed that their own college was making some initial steps to increase student participation in its decisions, although too late to affect them. Second, students desired the most in-depth participation in areas where they felt they had real concerns, such as undergraduate education, rather than in all university concerns. Third, rather than seeking control of such areas, the majority of seniors felt their actual role should be in the "voting rights" to "formal consultation" domain, with university and student agreement that this meant more than lip-service to such titles.

-- Self conceptually, the seniors generally held positive feelings, but to some degree these feelings were strongly "other-directed", such as in a need for "understanding" and a desire not to violate social norms. Most of the students felt quite certain about who they were ("identity"), and more than two-thirds felt that their chances for success in the future were above average. Academically, the students tended to rate themselves highly on general items (school ability, etc), but these self-ratings decreased as the items tended toward actual course performance (with the lowest self-ratings occurring in the course-related areas of math and science). The TCCP group comparatively showed a tendency to rate themselves higher on academic items and lower on items related to social-anxiety traits than did the non-TCCP students. These results represented a desired program effect.

Introduction

There can be no doubt about the historical contribution of the black colleges and universities to the general advancement of black people in this society. Serving as a vehicle for black intellectual development, a repository for black history and culture, and the only realistic means by which black youth might obtain degreed status, these institutions have provided leadership to the entire segregated educational system designed for Blacks. As recently stated by the Carnegie Commission for Higher Education (From Isolation to Mainstream, February, 1971):

> The colleges founded for Negroes are both a source of pride to blacks who have attended them and a source of hope to black families who want the benefits of higher learning for their children. They have exercised leadership in developing educational opportunities for young blacks at all levels of instruction, and, especially in the South, they are still regarded as key institutions for enhancing the general quality of the lives of black Americans.

Historically, the problems these institutions faced merely to survive were severe, but the last decade with its increasing move toward desegregation has intensified them even more. The black colleges must now compete with higher educational institutions in general if they are to remain viable. In their case, viability means more than increased educational offerings; it must also include programmatic solutions to curriculum and instructional development such as greater emphasis on student-oriented materials and the avoidance of what Martin Trow (1966) suggests as the pitfall of "grading the diversity between students rather than teaching for it." And given the economic status of the students'

parents (50 percent of the students who entered in 1967 had family incomes of less than $4000 per year; Parmeter, 1970), viability also implies finding a means to diminish the problem of the student's economic survival vis-a-vis his educational survival. As the following pages will demonstrate, the black institutions continue to serve a distinct population of youth who, because these colleges provided opportunity and support, have become a national asset. But the students who reached graduation four years after they entered college represent less than 30 percent of their original number. Although it is not intended to suggest that every student who begins any given college should graduate -- some will drop out because college is not to their interests, others because they lack academic skill or motivation -- the inability to keep a greater percentage of students in college until graduation is representative of the problems black colleges face.

In part the problems are similar to those facing higher educational institutions in general, and in part the problems are related to the unique conditions which formed the basis for the intitial organization and continuing existence of black institutions of higher education. As part of higher education in general, predominantly black colleges are faced with a need for reform of their curricular and instructional programs. Higher education has simply not caught up with the following situations:

a) Society is changing at an ever increasing rate and participation in that society demands greater skills, more capability to deal with ambiguity and solve problems, and more assertiveness on the part of its members.

b) Knowledge is vastly enlarged and fragmented.

c) The individual personality is confronted with a far more difficult task in finding a "core" self and the means by which to integrate the mass of experience.

While all institutions of higher learning are faced with mounting costs and limited revenues, the predominantly black colleges face this financial squeeze from a far more dire position. The students and their families are poor creating the necessity of keeping costs of tuition, room and board low and of devoting large proportions of operating funds to financial aid. Their relative level of endowment is low, and although the Federal government has provided some much needed support, in many cases the funds ar allocated to areas other than those of greatest need, or result on the basis of matching requirements in further draining academic operating resources. The students entering the predominantly black institutions bring with them persistence, desire, and anticipation, but they bring these traits in combination with the results of a less than adequate public educational experience, an acquiescent and reticent learning style, and a host of self-doubts. The combination of these and other problems facing black higher education suggests the necessity of both immediate developmental program efforts and the intensive study of the participants, processes, and results of such efforts.

The Thirteen-College Curriculum Program, as well as other related programs supported by the Institute for Services to Education (ISE), is an attempt to come to grips with a number of these problems both directly and indirectly. Directly, the Program is confronting the problems pertaining to curricular and instructional development based upon some assumptions about the needs of students in order to succeed in college and later, in society, and some assumptions about how these needs are met through materials, teaching efforts, and classroom conditions. The plan is relatively simple: 1) concentrate efforts on the first two years of college,

2) provide a central program structure including an identifiable program staff, administration, counseling -- essentially a "college within a college" approach, 3) develop the learning experiences around integrative "thematic" course areas, 4) organize the classroom structure and the presentation of materials to emphasize student participation, discussion, and problem solving, 5) take immediate pressure off of finding a single "right" answer and rote memorization of facts while pressing the process of "inquiry" and out-of-class practice of such behavior, 6) provide the teachers with time and reward for creating and organizing materials for this learning strategy and devising complementary teaching styles, and 7) recycle the whole process each year on the empirical basis of what works and from what is learned by the previous experience. More indirectly than directly, the Program is confronting the need to expand proven efforts from the small experimental base into the entire college structure. Similarly, issues concerning student financial aid, other student support services, institutional organization and management, and inter-institutional cooperation are being introduced and considered as an outgrowth of Program experience.

Obviously, the underlying ideas are easier to state than the program is to develop on the individual campuses. In addition, there are a number of other programs on these predominantly black campuses which are directed toward the same problems, but which differ in strategy and organization. And finally, the colleges generally lack adequate information of which to base decisions about their program efforts and allocation of resources. Therefore, the other major emphasis of the Thirteen-College Curriculum Program (and related program efforts) is to develop

and provide information, research, and evaluation pertaining to the colleges and their students upon which future rational decisions and development can be based.

This monograph, similar to other ISE Research Reports, has a dual purpose in this area of research and evaluation. First, an effort is made to present comprehensive descriptive data pertaining to black higher education -- in this case, the characteristics, achievements, experiences, and attitudes of a large sample of seniors who were approaching graduation in the spring of 1971. Second, the presentation provides the basis for comparison between groups of students who differed with respect to their initial college experience -- one identifiable group of students participated in the Thirteen-College Curriculum Program during their freshman and sophomore years, another group participated in the regular college program but was followed closely by ISE as a longitudinal "control" group for comparison to the Thirteen-College group, and yet another large group who also participated in the regular college program was included to act as a check on the representativeness of the smaller "control" group at this particular stage in college.

Nationally, a great deal of time, effort, and financial resources have been applied to the task of describing and assessing those who go to college and why, how the college student performs academically, what he thinks about himself, his experiences, and general issues of the day, and what factors seem to predict or describe his success and ultimate graduation from college (See, for example, Astin, 1966 - 71, Sanford, 1962, Lehmann and Dressel, 1963, Feldman and Newcomb, 1969). However, little of this attention has been devoted to students attending the predominantly

black colleges and universities. The most comprehensive recent study, Negro Higher Education in the 1960's (Jaffe, Adams, and Meyers, 1968), most closely resembles the scope of student studies conducted in white colleges, but with the exception of their data pertaining to admissions, recruitment, and financial aid obtained from college officials, the study is based entirely on survey data from relatively few colleges and students within colleges. Bayer and Boruch (1969) attempted to partial out the results pertaining to black students entering both predominantly white and black institutions in 1968 from the national survey of entering freshman conducted yearly by the American Council on Education. Morgan (1970) looked at the black ghetto student but this study followed no specific design and did not consider the predominantly black college student specifically. Egerton (1969) conducted a survey of the enrollment patterns of Blacks in state universities throughout the country including 17 predominantly black institutions which are described as a separate category, but the information obtained from the institutions is of a very limited nature. In addition to the above, larger studies, a host of smaller studies have considered specific research questions related to black students under different conditions of education or by different types of educational institutions. In general, all of these studies suffer from a number of considerations; sample sizes are small, the data usually have no longitudinal base, and the questions under consideration are necessarily narrow.

As an effort to alleviate the paucity of information surrounding the student in the predominantly black college, ISE, beginning with students entering college in the Fall of 1967, initiated a comprehensive

Figure I

Longitudinal Research Design for Assessment of A Curricular-Instructional Development Program Within, And the General Development of, Predominantly Black Colleges and Universities*

Entering Group	Year	Measurement Periods by Educational Level: Entering College	Freshman End-of-Year	Sophomore End-of-Year	Junior End-of-Year	Senior End-of-Year	One Year Followup
1	1967	1A**					
2	1968	2A	1E				
3	1969	3A	2E	1E			
4	1970	4A	3E	2E	1B		
5	1971	(5A)	4E	3E	2B	1D	
6	1972	(6A)	(5B)	4E	3B	2D	1D
7	1973	(7A)	(6B)	(5B)	4B	3D	2D
8	1974	(8A)	(7B)	(6B)	(5B)	4D	3D
9	1975	(9A)	(8B)	(7B)	(6B)	(5D)	4D
10	1976	(10A)	(9B)	(8B)	(7B)	(6D)	(5D)

* Institutions included in this longitudinal research program are all participants in the Thirteen-College Curriculum Program.

** The number signifies the group being assessed; the letter signifies the type of measurement.

Legend

A Population description measures
B "Real world" outcome measures (grades, attrition)
C Psychometric outcomes (achievement, personality)
D Population and "real world" outcomes
E "Real world" and psychometric outcomes
( ) Continued, non-experimental assessment

----- The area enclosed by the dashes signifies the actual experimental curricular-instructional development period and the groups directly affected by educational level.

longitudinal study of the students entering 13 predominantly black institutions (see Figure I). The study design provided for both cross-sectional comparisons of students at various points in time with particular emphasis on their progress in relation to the kind of entering college program in which they had participated, and longitudinal comparisons of student growth, change, and survival in college. The objective was to gather data which both comprehensively described the students and continuously followed their progress through college to graduation. The general research design and the characteristics of the students who entered these 13 institutions in 1967 are described at length in a previous ISE Research Report (Parmeter, 1970). The longitudinal design, of which this study is a part, has a number of desirable characteristics: 1) the sample sizes are relatively large, 2) the colleges are representative of predominantly black colleges in general, 3) much of the individual student data is continuous over four years, 4) each assessment point included a broad range of student data including test results, achievement data, background and experience data, attitudinal data, and personality data, and 5) all of the major questions being addressed have the underlying support of multiple checks for consistency and accuracy such as direct observations, documentary evidence (e.g., student transcripts), independent on-site visitations, and the standard research estimations of reliability and statistical significance.

This study of the descriptive and comparative attitudes, experiences, achievements, and backgrounds of predominantly black college seniors in combination with other studies of these same students marks the end of the first phase in this longitudinal design. An entering to exit base-

line of data has been established for use in both judging the progress of groups of students who began college after 1967 and assessing the initial effectiveness of the Thirteen-College Curriculum Program. In general, the entering norms for these students provided the following descriptive characterizations:

-- women comprised a majority of the entering students

-- one-half the students came from small towns or rural areas

-- their families were poor

-- one-half of the students' parents had less than a high school education

-- the students preferred a college setting where more than 50 percent of the enrollment was Black

-- the students were highly motivated to complete college

-- most of the students aspired to achieve at a level above the middle of their class and pursue a professional career

1-4

-- their entrance examination abilities fell about one standard deviation below the national norm, but their non-verbal scores fell at the middle of the adult national norms

1-5

-- the students had certain self-doubts about their ability to succeed in college, but perceived themselves as average to above average on academic abilities in relation to peers

-- students indicated a high need for "understanding" and a desire not to violate social norms

-- comparatively, the Thirteen-College students came from poorer, less educated family backgrounds, but were similar to the regular college students in most other ways

The comparative assessment of the students' educational achievement over the four year period indicated that the Thirteen-College Program students were far less likely to drop out, that they performed at least as well as and in some cases significantly better than the regular students on tests, that they achieved slightly better grades, and that they showed more positive personality and self concept development.

Content of the Senior Questionnaire, 1971

The data summarized in the following pages were collected by means of a fourteen page, self-administered questionnaire (included in the appendix) which was distributed late in the 1971 Spring term to most seniors approaching graduation in the thirteen participating colleges. The predominantly multiple-choice format included 451 variables divided into fifteen general areas of interest. Some of the items included were of continuing interest in that they had been previous sources of data on students followed by ISE since they entered college in 1967, but the instrument was designed to essentially stand alone for purposes of describing graduating seniors. The thematic sections of the questionnaire included:

1. General and Background Information
2. College Background and Future Plans
3. College Grades
4. Financing of College Education
5. Non-Academic Achievements
6. Satisfaction with College
7. Attitudes toward Freshman Year
8. Attitudes toward Counseling
9. Continuing Attitudes toward Instructional Experiences
10. General Attitudes toward Higher Education
11. Attitudes toward Black Colleges
12. Feelings of Control over Environment

13. Actual and Desired Student Role in College Policy
14. Areas of Self Concept
15. Attitudes toward the Questionnaire

The General and Background Information section (items 1 - 12 in the following tables) included questions designed to provide a look at the students' previous experiences and socio-demographic circumstances. Items were concerned with high school and family background, previous pre-college and within-college program experiences, and personal characteristics (age, marital status, sex, etc.).

Items included in the College Background and Future Plans section (items 13 - 24 in the following tables) covered conditions surrounding entrance into college, housing while in college, concentration of studies and vocational or graduate school plans, highest academic degree expected, and plans immediately following graduation. In addition to just the student's expectations, items were included for assessing the degree to which the student was following the appropriate steps necessary to accomplish these expectations-aspirations.

College Grades (item 25 in the following tables) were self-reported on a nine-point scale moving from a "D" average (1.49 or less on a four-point scale) to an "A" average (3.80 to 4.00) for major area of study, minor area of study, and cummulative grade-point-average. Previous studies have demonstrated that self-reported grade-point-averages are highly reliable and valid when included in the context of a general questionnaire (see Maxey and Ormsby, 1971). However, ISE is independently

collecting grades from the participating institutions and further checks on the accuracy of self-reported grades will be conducted.

The Financing of College Education section (items 26 - 29 in the following tables) contained items concerning total college-related indebtedness to various sources, amount of money earned during summers and school years while in college, amount of hours worked during college, and an overview of the proportional financing of college from various sources (not included in this report due to the cumbersome nature of the data).

Non-Academic Achievement (items 30A - 30B in the following tables) in college is increasingly becoming recognized as a predictor of future success at least equal to that of college grades (see Wallach and Wing, 1969, and Hoyt, 1966). Irrespective of the methodological issues and conflicting results, it is logically consistent to conclude that these important areas of accomplishment are the source of practical experience and the pre-conditioners of future behavior. The questionnaire included items which assessed the students' involvement or recognition in the areas of student government and political activity, art, community service, writing, drama and forensics, music and dance, science, academic groups, and athletics. These accomplishments were also summarized into a single scale of non-academic achievements.

Satisfaction with College (items 31 - 33 in the following tables) included items concerned with the student's overall feelings about his experiences in the college attended and the probability of his attending

that college again had he the choice.

The student's initial experiences in college has a powerful effect on both his chances of completing his college education and the manner in which he perceives his continuing college experience. In the Attitudes toward Freshman Year section (item 34 in the following tables), items were concerned with how the student felt about these initial experiences: the degree of impersonality of the institution, the difficulty encountered in courses, the contribution of these experiences to a sense of self-confidence, the degree to which these experiences contributed to rational decisions about future college work, and the nature of classroom conduct and instruction.

Attitudes toward Counseling (item 35 in the following tables) were included to provide a basis for assessing the effectiveness of college counseling programs across several areas such as personal problems, financial aid, academic advice, and developmental meetings with other students. The response format was constructed to look at both the frequency of use of counseling services as well as the perceived nature of the interaction.

The most extensive section of the questionnaire was concerned with Continuing Attitudes toward Instructional Experience (items 36 - 94 in the following tables). In this section, which considered various aspects of classroom instruction, the students were asked to indicate the degree of truthfulness or falsity of a statement as it applied to their freshman, sophomore, and combined junior and senior years respectively.

The statements addressed teaching practices, expected student behaviors, course materials, and course content. In the design of this section, the real concern was not with factual accuracy per se (although the results for any given item at a particular time period for all respondents, in all probability, adequately factually represents the existing state), but rather with how students initially perceived things, and then, how these perceptions changed in accordance with continuing experiences. Take for example the idea of student discussion in the classroom. If, considering two different groups of students, one group of students initially participated in classes during which a high level of student discussion was expected and the other group participated in classes in which it was a practice for the teacher to lecture and only respond to formally raised questions, then during the junior and senior year when the two groups of students were participating in the same classes, it would be expected that the former group should perceive the level of discussion as lower than the latter group, irrespective of the actual degree of discussion.

In terms of General Attitudes toward Higher Education (items 95 - 115 in the following tables), the respondents were asked to rate as to their extent of agreement or disagreement a number of items concerning the general practices and processes of higher education. The items included such areas as student maturity, the rights of college officials to regulate student behavior, the role of college in an individual's life, how college might be improved, who should be admitted to college, and general teaching practices.

The students' Attitudes toward Black Colleges (items 116 - 130 in the following tables) were based on the same responding procedure as the previous section. In general, the items were designed to tap the students' feelings about the adequacy of their experience as compared to students attending predominantly white institutions, the type of college -- and its racial composition -- that black students should attend, the way the college curriculum should be organized, who should teach and what should be taught in black colleges, and the role of the black college in the cause of black advancement.

Included as a part of all ISE questionnaires are a series of items pertaining to Feelings of Control over Environment (items 131 - 137 in the following tables). In general, they attempt to get at the degree to which the respondent feels that things outside of his control influence what happens to him. Some of the items were part of the base-line Colman report (Equality of Educational Opportunity, 1966) such as "Good luck is more important than hard work for success." Several similar items were added to more specifically deal with success or accomplishment in school. To each of these items, the respondent was asked to indicate his agreement or disagreement on a five-point scale.

The Actual and Desired Student Role in College Policy section (items 138 - 139 in the following tables) was composed of a series of parallel items in which the student was asked to indicate on a continuum moving from "control" to "little or no role" the degree to which he felt students should have a say and the degree to which, at his institution, they did have a say over the following areas: faculty appointment and

promotion, undergraduate admissions policy, course content, student discipline, and bachelor's degree requirements.

Given individual differences in background and personality -- as related to degree of exposure, success and failure in various areas such as interpersonal interactions, classroom experiences, and specific social opportunity -- students develop a variety of self perceptions. These Areas of Self Concept (items 140 - 182 in the following tables) are particularly important agents in the formal, as well as continuing, educational process. They have implications to the degree to which an individual will expose himself to a given potential task, they have shown to be highly related to actual performance, and given a prior knowledge of their relative strength or weakness they provide the basis for more rational curricular and instructional planning. For these items, the respondent was asked to rate himself (as compared to other peers) on a series of traits or abilities using a five-point continuum moving from "much below average" to "much above average." Most of these items have been a part of ISE's continuing assessment of students.

The respondents' Attitudes toward the Questionnaire (item 183 in the following tables) were included to provide evidence concerning the degree to which the questionnaire was accurately completed and the degree to which the questionnaire adequately covered the important aspects of their college career.

Subjects of the Study

The Senior Questionnaire, 1971 was completed by 2,448 students

representing three different entering groups on each of the thirteen participating college campuses.

-- The Thirteen-College Curriculum Program students, numbering 327, who enrolled in college in the Fall, 1967 and in 1971 were in their senior year.

-- The "1967" control students, numbering 312, who also enrolled in college in the Fall, 1967, and who were selected at that time as comparison students to be followed year by year.

-- The "1971" control students (indicated as "other" in the tabular data presentations), numbering 1,809; these students were expected to graduate in June, 1971 and were selected for this study in order to increase the representativeness of results and broaden the comparative base; no previous data had been gathered about these students.

The "1971" control students were included in order to provide a larger base upon which to ground the resulting statistics. In reality, these students more clearly represent the "average" student than do either the "1967" control students or the Thirteen-College Program students. The "average" student is less likely to be a senior four years after entering college (more than 35 percent of the "1971" control students entered college before 1967); the "average" student is more likely to have transfered from another college (slightly more than 20 percent of the "1971" control students began college at a different institution); while in all cases the senior approaching graduation is more likely to be female, the likelihood is less for the "average" student (about 60 percent of the "1971" control students and the Thirteen-College students). However, this last fact should not be construed as either a result of program experience or as a change in the proportional representation according to sex. The results by sex appear

simply to be due to the fact that the women students tend to finish sooner than men students (the same percentage of "1971" control students who entered college in 1967 were women as in the other groups, that is, about 70 percent). It is also important to note that the proportional representation of men to women in the "1971" control students is approximately the same proportion of men to women who entered college in 1967 in these thirteen colleges (about 60 percent female, 40 percent male).

Combined, the three groups of students represent about fifty percent of the total number of students approaching graduation on these campuses. However, in terms of the students who actually began college in 1967, the proportional representation across the groups is quite different. Only about one-third of the students who began college in 1967 as regular college students (similar for both the "1967" and the "1971" control students) were present as seniors approaching graduation in the Spring, 1971. By comparison, slightly more than fifty percent of the Thirteen College Program students were present as seniors approaching graduation. While the exact effect of this differential on the following data cannot be measured, it should be considered a potential factor in the case of observed differences. Indeed, it is a central hypothesis that a program designed to re-orient the classroom and the entering college experience of students should be reflected in both attitudes and differential attrition rates.*

*Another ISE research report, currently in preparation, will deal primarily with the question of attrition and performance in black colleges based on a study of official student transcripts, and will serve to further explore the effectiveness of the Thirteen-College Curriculum Program in moving students on to graduation.

To summarize the above discussion, the three groups of students do differ on some important, overt dimensions:

1) The Thirteen-College Curriculum Program students represent a greater proportion of the total number of students which entered college in 1967 as compared to both the "1967" and the "1971" control students; they have had a different initial exposure to college via their program participation; they include a higher proportion of women students than the "1971" control group; unlike the "1971" group, they all began college at the same institution in which they are presently enrolled.

2) The "1967" control students are similar to the Thirteen-College group in terms of proportion of women students; they, too, all began their college at the same institution in which they were completing their degree and they all began in 1967; unlike the Thirteen-College group and similar to the "1971" control group, proportionately fewer of them were present in their senior year.

3) The "1971" control students are most representative of the "average" black college graduate; they tend to take longer to reach their senior year, especially in the case of men students; they are more likely to have transferred from another institution, but the final proportional representation of men to women is similar to the yearly entering college representations.

The importance of these outward differences is related to the comparative strategy involved in ISE's longitudinal research design. As indicated, the data is to serve two primary purposes: 1) to increase the overall understanding and awareness of the black college student and provide baseline data for continuing study, and 2) to serve as a means for evaluating the effect of a major innovation in the entering college experience for students in black colleges and provide the basis for more rational program development on the individual campuses.

Therefore, the groups together insure an adequate representation

of the characteristics of black college seniors approaching graduation. Comparison between the "1967" control students and the "1971" control students will provide an estimate as to the representativeness of the smaller "1967" group for the longitudinal comparisons with the Thirteen-College group. It is expected that in most respects the "1967" and the "1971" groups will be similar, with the possible exception of academic achievement and major field of study (based on the earlier completion of studies in the "1967" group). If this assumption holds true -- as the following results do suggest -- then comparison with the Thirteen-College students can be based upon the most accurate "regular" college group. In most cases, this will be the "1967" and the "1971" groups combined, but in areas where these two groups differ (such as achievement), the comparisons can be based on a more rigorous test using only the "1967" control sample.

Representativeness of the Data

No formal sampling procedures were used in selecting either the participating colleges or the senior students included in this study. Therefore, the degree to which these results are applicable to seniors approaching graduation across the range of predominantly black colleges and universities can only be inferred from the apparent characteristics of the colleges included in the study, or by independent comparison of student background data from this study with that of other non-participating institutions. Similarly, the degree to which the overall results or comparisons can be generalized to any given college in the

TABLE I

Descriptive Characteristics of Predominantly Black Colleges and Universities Included in Assessment of Graduating Seniors*

Institution	Location	Founded	Status	Highest Degree	Total Number of Respondents	Freshman Entering in 1967	Respondents Who Entered in 1967
Alabama A&M University	Normal, Alabama	1873	Public	Masters	202	591	153
Bennett College	Greensboro, N.C.	1891	Private	Bachelors	60	232	55
Bishop College	Dallas, Texas	1880	Private	Bachelors	157	677	93
Clark College	Atlanta, Georgia	1869	Private	Bachelors	125	363	103
Florida A&M University	Tallahassee, Fla.	1887	Public	Masters	190	967	119
Jackson State College	Jackson, Mississippi	1877	Public	Masters	343	1032	273
Lincoln University	Oxford, Pennsylvania	1854	Private	Bachelors	66	269	58
Norfolk State College	Norfolk, Virginia	1935	Public	Bachelors	256	1083	113
North Carolina A&T Univ.	Greensboro, N.C.	1891	Public	Masters	333	852	232
Southern University	Baton Rouge, La.	1880	Public	Masters	472	2998	287
Talladega College	Talladega, Alabama	1867	Private	Bachelors	87	231	72
Tennessee A&I University	Nashville, Tenn.	1909	Public	Masters	51	1105	30
Voorhees College	Denmark, S. Carolina	1897	Private	Bachelors	106	378	86

*There are approximately 112 predominantly black colleges and universities; all of the colleges and universities included in this study are original participants in the Thirteen-College Curriculum Program which first accepted students into the Program in the Fall of 1967.

study group can only be inferred from the proportion of students responding at the institution as well as by the degree to which the institution individually corresponds to the overall student background information.

In considering the general representativeness of these institutions, some of the factors which would seem on the surface to be important are: 1) geographical location, 2) size of institution (total enrollment and size of the senior class), 3) type of institution (public or private), 4) highest degree offered and 5) length of service to the black community (that is, when founded). Table I shows the characteristics of the colleges included in this study. Based upon just the overt descriptions of the institutions, it is clear that they include a broad cross-section of black colleges and universities. The institutions are located in 11 different states; the only southern states not represented are Arkansas, Kentucky, and West Virginia. The schools are almost equally split between public (7) and private (6) institutions. Seven offer only a bachelor's degree and six offer degrees through the master's. The range in total enrollment moves from about 600 students to almost 10,000 students with an average enrollment somewhere between 3,000 and 4,000 students. All but one of the institutions are more than fifty years old.

In terms of student representativeness, Table I also shows the total number of seniors at each institution who began college in 1967 and who

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*The data included in this study has been separated into comparable results for each participating institution. The analysis of between college differences is currently being conducted and will be the basis for a future ISE research report.

are included in this study. It is apparent that the representation of seniors in this study is quite adequate for eight of the institutions (65 percent or more included), and only one institution is extremely low in representation. Those institutions which are less well represented are, for the most part, larger schools and more urban in their setting. Both of these factors have a history of delimiting direct student-data-gathering efforts. However, comparison of the background and socio-economic data in this study to the original norming data gathered on these students during the fall of 1967 (Parmeter, 1970) indicates that there are no severe differences between the two groups. This in combination with the large sample size included in this study, would suggest that the data have substantial applicability to the individual colleges in the study group.

Presentation of the Data

In the pages that follow, each of the thematic sections of the questionnaire will be summarized in terms of the actual results. These summaries will cite and discuss those elements of the data which, on the surface, seem to be the most important and illustrative. In order to add a degree of cohesiveness to the enormous amount of data, interpretation will be built into the summary of results for each section.

In presenting the data, each section begins with results pertaining to the general characteristics of all of the students, differentiated by sex where appropriate. This general discussion then is immediately

followed by a second discussion concerning the comparative differences between the three program groups -- the "1971" control group, the "1967" control group, and the Thirteen-College Curriculum Program (TCCP) group. The discussion and interpretation of results for both the general characteristics and the comparative differences will be supported by references into the actual data and by graphic representations of the results by total respondents and by sub-groups.

Following the text of this report, the complete data is presented in tabular form. These tables, which follow the same order as the data summaries, provide the basis for further study of results and additional interpretation of their meaning. The organization of the tables was determined by a need to present a massive amount of data in a manner which allowed for direct comparisons and ease of interpretation. Each table is headed by a statement that as nearly as possible respresents the actual item; then, each of the possible response-categories for which there were actual respondents is printed beside the line of data it represents.

The data included in the body of the tables are shown as percentages of a given category for each of the different categories. Missing responses are not included in the percentage transformation, but each category of respondents shows the actual number who responded to a given item below the list of percentages for that category. In addition to showing the percentages on the actual number of respondents, the interested reader or researcher is provided with a chi square (X^2) statistic

and associated degrees of freedom for each comparison block of percentages. These statistics provide a basis for answering the question of whether the observed differences are significantly greater than those which might have occurred by chance (or more simply, are the differences between groups' real differences). Immediately after the tables, an explanation of the use and interpretation of the chi square statistic is provided as well as a list of critical values of the chi square for various degrees of freedom.

While the purpose of this report was not to deal directly with questions of a longitudinal nature, some of the sections of the questionnaire asked the student to take a retrospective longitudinal look at his or her college career. Other questionnaire items are identical to those asked of the Thirteen-College and the "1967" control groups on several occasions beginning in the fall of 1967. Preliminary analysis of these continuing items using the entering Fall, 1967 data and the comparable Senior Questionnaire, 1971 data has been completed. Although the longitudinal considerations will be the subject of a future ISE report, some of these longitudinal findings add power to the interpretation of this study's data and will be cited where appropriate.

General and Background Information

Overall Characteristics. For most college students, graduation from college is an important step in achieving a higher status in society. For the young Black graduating from the predominantly black college, obtaining his diploma will not result in as many doors being opened to him as to his white counterpart, but as compared to his parents, the distance he has traveled is great. As might well be expected, the backgrounds of these students are varied, but the predominant pattern is primarily composed of past poverty and segregation. The following list suggests the most salient characteristics of the students viewed as a whole.

-- The majority of students (about two-thirds) are of normal college-graduation age -- 20 or 22 years old -- but a notable number of students are 25 or more years old (this may in part be due to returning veterans).

-- Slightly more than twenty percent of the students are married and half of this number are supporting a family.

-- The place of their birth and the source of their previous education is overwhelmingly the traditional South and for the most part they attended college in their home state (more than 90 percent of the students were born and raised in Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, or Texas).

-- They are more urban than rural in their background; better than fifty percent of the students come from towns over 50,000 in population, but less than ten percent come from suburbs.

-- The public school system they attended was overtly or covertly segregated (86 percent attended all-black high schools) which in many cases meant that it was small (38 percent from graduating classes of less than 100).

-- Their parents varied in level of educational accomplishment; about eight percent had graduated from college, but the majority of parents had not completed high school and more than a third of the mothers and 20 percent of the fathers had no more than a grade school education.

-- The median family income was between $4,500 and $5,500 for the previous year, just about one-half that of the average college student family income.

-- The parent's occupations reflect the cause of this lower income level; more than fifty percent of the fathers, if employed, held, at best, semi-skilled jobs while less than eight percent were employed at any professional level; the mothers were less likely to be employed (42 percent unemployed), but of those that were, 20 percent worked as domestics and about 14 percent worked in educational fields.

Out of these facts a fairly clear pattern seems to emerge. Due both to poverty and disadvantaged educational background, the students continue their education near home at the one type of institution -- the black college -- which offered a recourse to them. Given the background characteristics of this group of students, it is to their credit that they moved to graduation, but it is also not surprising to find that the final numbers at that point were only about one-third of the original entrants.

In moving toward the goal of college education, one important question is to what degree special program help or involvement supported these students' educational efforts either prior to college entrance or during college. Obviously out of this sample, a fairly large proportion (15 percent) had participated in the Thirteen-College Curriculum Program, and the results of this participation are clearly shown by the higher continuance rate. But what of other programs related to youth of disadvantaged backgrounds?

-- Including the Thirteen-College Program, 55 percent of the students indicated that they had participated in some program and about ten percent of the students had participated in more than one program.

-- Of the programs identified for the students, the greatest number of the students indicated that they had participated in the Neighborhood Youth-Corps (11.9 percent), followed by Upward Bound (4.6 percent)

-- More than one percent of the students had participated in one of the following programs: Health Carreers, Student Exchange, Intensive Summer Studies Program, and Manpower Development.

Given the relatively large participation in such programs, it seems clear that efforts -- largely of federal origin -- are supportive of the attempts of young Blacks to continue their Education. While not all of the programs were specifically directed toward educational ends, they all included some educational or enrichment components. With no further evaluation of these programs, it does seem that they helped to improve existing conditions.

Comparative Results. Two comparative differences between the three groups seem of particular importance and central to other data included in this section. First, as compared to both of the control groups, the TCCP students come from decidedly more disadvantaged backgrounds. Second, as compared to the TCCP students and the "1967" control students, the "1971" control students take longer to graduate from college, and thus, tend to be older and are more likely to be married. A third obvious difference is the level of special pre-college or college program participation, but these differences are spurious in the sense that by definition TCCP students all participated in a special program, while the other groups similarly included about fifty percent of the students who had participated in special programs.

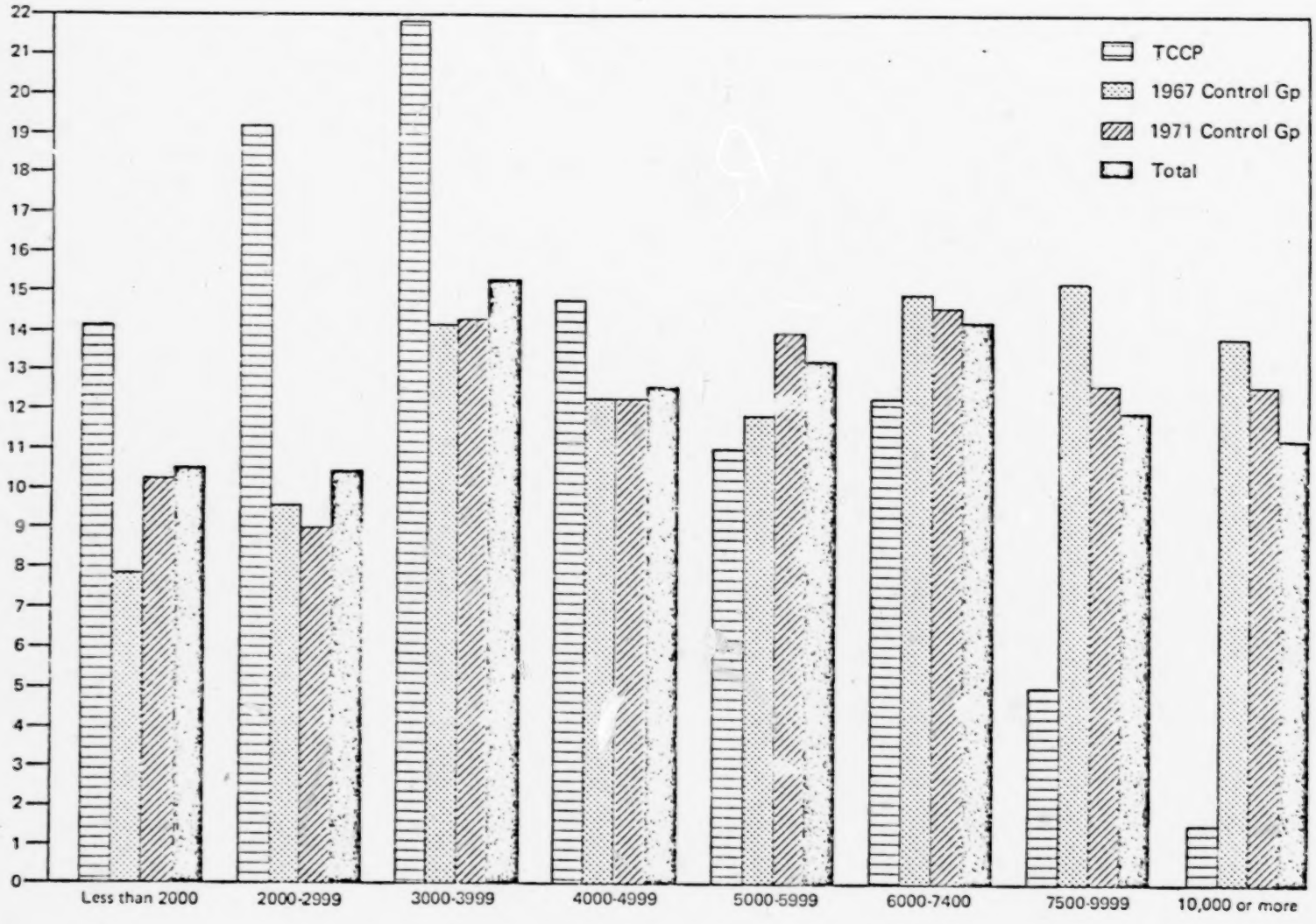

Figure II. Percent of Students by Family Income for the Past Year

Figure II shows the percent of students by the different groups at the various family income ranges. This graphic interpretation clearly demonstrates the higher level of poverty and lower mean family income of the TCCP students. While the two control groups are fairly evenly distributed between $2000 and $10,000 family income, the TCCP students include more than one-third who came from families with less than $3000 per year income and more than two-thirds who came from families with income less than $5000 per year. This dissimilarity between the TCCP students and the other two groups (who are generally homogeneous in family background) is apparent in several obvious corollaries. Their fathers have less education; both their mothers and fathers reflect poorer employment status; and a much larger percentage of TCCP students come from families in which there was a mother only. The importance of these differences is only to accentuate the point that poverty is not an a priori barrier to progressing educationally if educational institutions: 1) provide the opportunity of entrance, 2) focus educational programs on student strengths rather than penalizing students for their entering weakness, and 3) support low income students with work-free financial aid during the first two years of college.

One other difference should be touched upon. In the area of special program participation, the TCCP students include a large number of students who had participated in the Upward Bound programs (18.3 percent as compared to only about two percent for the control groups). This difference is important in two ways. First it reflects an initial commitment of the TCCP program to concentrate on enrolling low income "disadvantaged" students and providing these students with an educational

program which would enhance their continuation in college. Secondly, it could be argued that these larger numbers of remaining Upward Bound students may be reflected in other comparative results such as achievement and attitude. The designers of the TCCP program hope that this is true, especially because it would mean that they have been at least partially successful in constructing an educational career ladder conducive to continuance. Such a ladder is not as readily present in the regular college programs.

College Background and Future Plans

Overall Characteristics. Given the socio-economic background of these students, it is not surprising to find that while they have survived to complete or nearly complete their undergraduate education, it takes a large proportion of them longer to graduate than the institutionally-prescribed four years. Irrespective of the delay, most of these students aspire to further education and degrees. But whether these aspirations for many of the students form real expectations and become reality remains to be seen. In many ways -- with the exception of number of opportunities and extent of financial resources -- this situation appears to hold true for most college graduates.

Part of the aspiration to go to graduate school for most students is composed of the recognition that they have survived one step and that continuation and more degrees means even greater status and reward. Against this desire are weighed the known costs paid in attending college

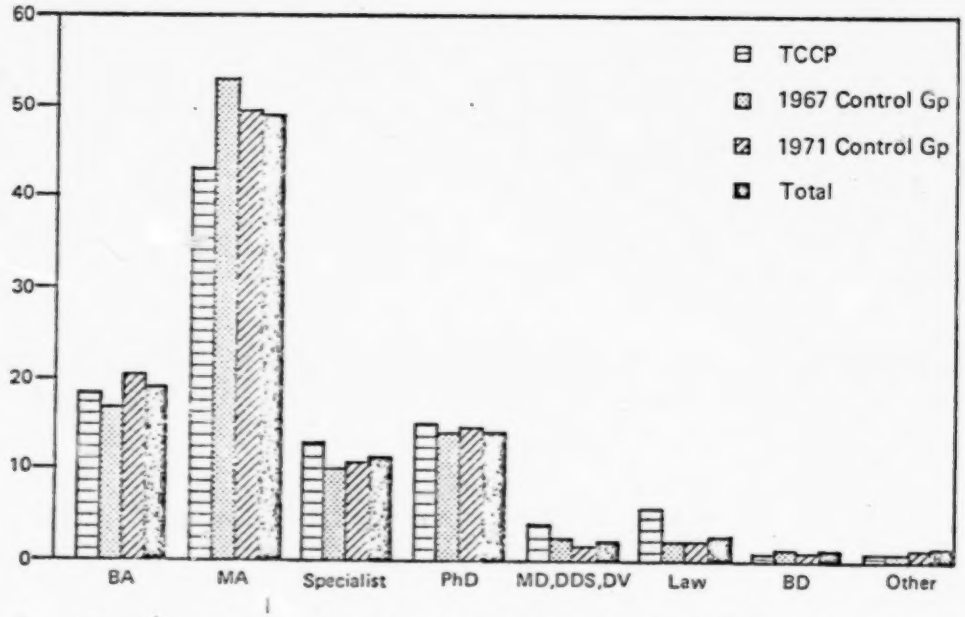

Figure III. Percent of Students by Highest Academic Degree Expected

to achieve the bachelor's degree which for most students is measured in more than just financial terms. Beyond the struggle for financial survival and its concomitant drain on human resources are the prices exacted in tedium and regimentation found in many college programs. In addition,historically, the opportunities for further education for black students have been limited by a pattern of racial exclusion -- the result of which contributes to an underlying attitude of self-defeat. Therefore, it does not seem unreasonable to suspect that continuance for many students will be based upon either the necessities of job continuation (such as in teaching) or a set of unique, positive circumstances in the undergraduate program which would make the struggle for continued education a rewarding possibility.

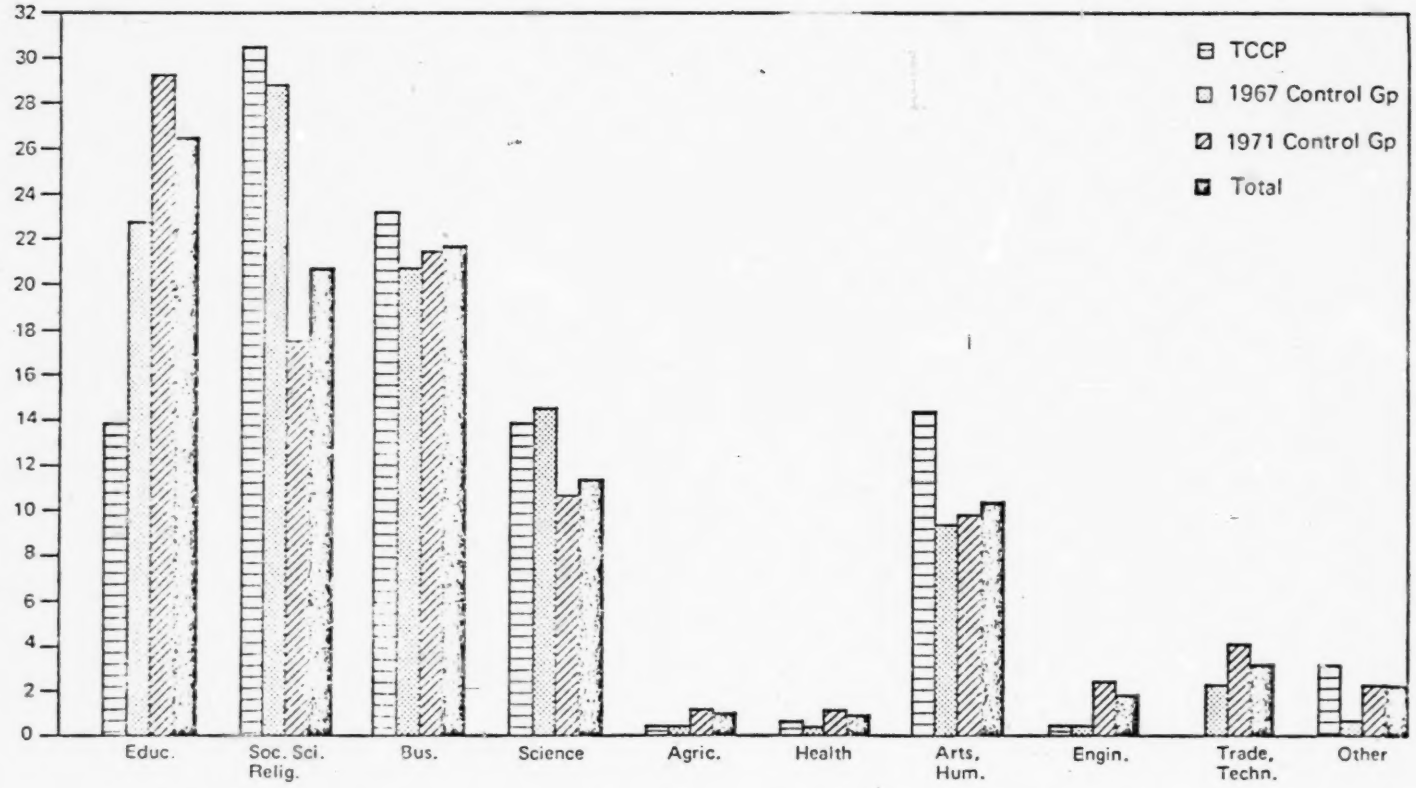

Figure IV. Percent of Students by Undergraduate Major Field

All but 20 percent of the students indicated that they would pursue at least one degree beyond the bachelor's. Figure III shows the distribution of students by group according to the highest academic degree expected. About fifty percent of the students indicated they would attempt a master's degree and 15 percent indicated they would try for a Ph.D. or equivalent degree. In addition, 11 percent indicated a specialist's degree between the master's and doctoral level. Two percent of the students indicated a medical degree and three percent marked a law degree.

Compared against these aspirations, however, only 20 percent of the students indicated immediate attendance in graduate school the next fall, and this estimate of attendance is supported by the number of students actually in the process of making application at the time the questionnaire was administered (68 percent of the students indicating a higher degree had made no application and only 17 percent indicated that they had been accepted at one or more graduate institutions). By comparison, the largest majority of students indicated that they would either "get a job" (26 percent) or "enter a profession" (38 percent, mostly in teaching).

The data pertaining to immediate future plans (Table 17 in the Appendix) cited above seems to be in agreement with the students' major fields of study. As those results imply, there is a large move to enter into employment. As seen in Figure IV, classification by major shows the largest student percentage in education (26 percent, mostly

elementary) followed by business -- persuasive fields (21 percent). Of the more traditional college major fields, social science and religion were most frequently indicated (20 percent), then science (12 percent), followed by arts and humanities (10 percent). All other fields combined included less than 10 percent of the students.

In general, this distribution of major field follows historical precedent in black higher education, but also suggests trends for the present and future. Traditionally, the black colleges have produced mainly majors in education and in religion -- primarily because these were fields left to Blacks as part of segregation. Most fields were almost exclusively filled by the white majority. Even with coming integration there is a large, although declining, demand for black teachers and ministers in the South, and this demand is largely met by the predominantly black colleges. On the other hand, federal and judicial pressure in combination with increasing black aspirations have led to a larger opportunity in other fields, especially business. Employers from national and regional firms are attempting to increase the number of Blacks in professional and managerial positions, partially due to the pressure of equal employment opportunity clauses, partially due to increased awareness of black economic potential and buying power, and partially due to the recognition of black business talent emerging from these colleges. These forces are apparent in the number of students selecting business majors.

But of special interest are the rather large proportions of students

emerging from social sciences, science, and arts and humanities majors. Part of the social science percentage is the traditional religion interest, but part of it must be due to the increasing vocal and intellectual black concern with social problems and social organization which is clearly apparent in a latter section of this report. The increase in science majors reflects both the increased demand for scientific talent and the ability of the colleges to produce the level of training necessary for graduates to enter scientific and business fields, or to be accepted to graduate school in this academic field; potentially, the increased opportunity in medical fields will enlarge this choice even more. The relatively large number of students majoring in arts and humanities is partially due to opportunities to teach in these areas in secondary school, (also true for the previously-mentioned area), but it also suggests that the colleges are increasing their educational opportunities in these areas to complement the growing recognition of black writing, music, and art. It is in these latter three areas of student majors that the contribution to culture and intellect should appear in the future, and the increase represents a major trend in the liberalizing of the colleges' curricula.

Table II shows the comparative percentages by major fields for students graduating from all colleges and universities nationally and from the 13 black institutions included in this study. While the black colleges show higher percentages of students in fields traditionally considered as their primary curricula (particularly education), it is also clear that these differences are not large. In fact, the over-

TABLE II

Major Fields of Students Graduating from College Nationally Compared to Students Graduating from 13 Predominantly Black Colleges (in Percentages)

Major Field	Colleges[1] Nationally	Black[2] Colleges
Education Fields	21	26
Social Science Fields	23	20
Business Fields	13	22
Science and Math Fields	12	12
Agricultur Fields	1	1
Health Fields	3	1
Arts and Humanities Fields	15	10
[illegible]ds	6	2
All Other Fields	6	6

[1] Based upon 798,070 students graduating between July, 1969 and June, 1970 (Source: E ned Degrees Conferred: 1969-70, National Center for Educational Statistics, U.S.O.E., 1970)

[2] Based upon 2294 graduating seniors from 13 representative black colleges in 1971

all comparative balance between major fields for both groups is quite similar. These percentage comparisons support the conclusion that black colleges are broadening their curriculum and improving the access of black students into fields from which they were formerly excluded either by lack of educational opportunity or by explicit segregation.

Comparative Results. There is a significant difference between the three groups of students in terms of their aspirations toward graduate degrees. In examining the percentages (see Figure III) it can be seen that there is little difference between the two control groups, and

they generally reflect the overall results. However, there are some important differences exhibited by the TCCP group. Not only are their aspirations higher in general, they show important trends toward law and medicine. In addition, the TCCP group shows significantly more follow-through in pursuing these aspirations. Thirty percent of the TCCP students indicate graduate school immediately following graduation (as compared to only 20 percent of the control groups), and almost one-half of those TCCP students who aspire to a graduate degree are actively pursuing admission as compared to only 30 percent of the control groups.

There are also notable, significant differences in the resulting student majors by group. Only 13 percent of the TCCP students selected majors in education as compared to 17 percent for the "1967" control group and 29 percent for the "1971" control group. This pattern is almost the reverse for the social science major. Both the TCCP and the "1967" controls were higher in science majors (14 percent) as compared to the "1971" controls (10 percent). The TCCP group was also higher in arts and humanities majors (14 percent) as compared to both of the control groups (about nine percent).

These results help demonstrate some of the differences between the TCCP program and the regular programs. The TCCP students are more deeply immersed in the liberal arts from a participative as well as a course standpoint than are students in the regular programs. They are not pushed so rapidly into making major field choices, and so have time to explore, as well as concentrate study in broader areas of concern.

Their higher aspirations and greater follow-through with regard to graduate education may partially be a function of the positive reward inherent in the program's pursuit of expression, method, and ideas. As later results will demonstrate, the TCCP students were more deeply involved in the "doing" of their education, and more broadly exposed to all areas of intellectual activity. When all of this is added to the much higher continuation rates for TCCP students, it stands as a forceful argument for altering the context of education more toward the TCCP model.

College Grades

Overall Characteristics. Innumerable predictive studies have demonstrated that college grades are "normalized" similarly for individual institutions (that is, they show the same range, central tendency, and distributive characteristics), but differ between groups both within and across institutions. These general tendencies hold for the seniors responding to this questionnaire, as exemplified by the following observations.

-- The grade-point-averages in all cases range from a "C-" average to a straight "A" average (given minimum averages for graduation, this range would be expected).

-- On a cumulative basis (an average of all college grades), 75 percents of the students fall between a "C+" and a "B" average.

-- In general, women achieve somewhat better grades than men students; this also corresponds to national tendencies and reflects probably more efficient study habits and somewhat easier fields of study (women load highly into education fields, men tend to load higher into math and science).

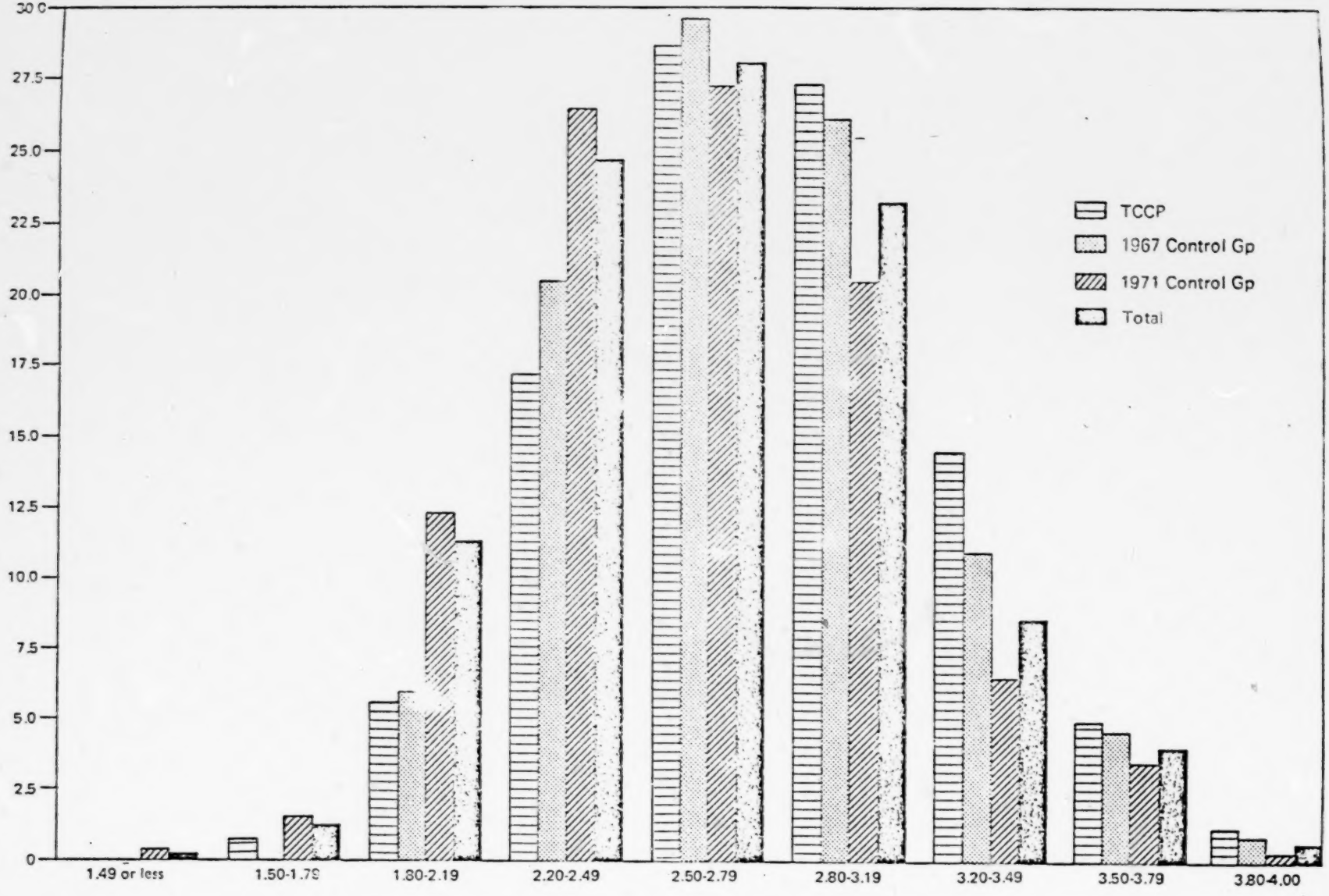

Figure V. Percent of Students by Cumulative Grade-Point Average

By the time the students reach the senior year, the range of grade performance has already been notably truncated by the process of attrition. Nevertheless, as shown on Figure V, the students at this point do reflect a wide range of achievement in a very normal distribution. Judging by other entering college characteristics, this distribution includes some students who are performing higher than would be predicted and some students who are performing less well than would be predicted. And similarly, some students have discontinued their education, when based on past performance and ability they would have been expected to continue. Although not a new idea, it would seem that the challenge to higher education is one of constructing programs which allow all students to find the motivational keys to positive involvement in academic life while providing that all students pursue their education from points of strength and existing ability.

Comparative Results. Figure V shows the comparative achievement across the different groups on a cumulative basis. While the distributions for all of the groups appear similar, careful inspection of the graphed percentages reveals that there is a definite rank order in achievement, with the TCCP group the highest, followed by the "1967" control group, with the "1971" control group the lowest. All of the groups have approximately the same mode, but the TCCP group crosses from the inside to the outside of the curve at this point.

Part of these results are attribtutable to grades received during the freshman and sophomore years. In comparing the groups on major

field performance (see Table 25A in the appendix), the differences between the TCCP group and the "1967" control group disappear, but both of these groups achieve at a superior level to the "1971" control group. It could be argued that the better achievement in the TCCP group on a cummulative basis was a function of easier grading practices while they participated in the program. It is true that many less TCCP students were dropped from college due to low performance in the first two years, but as pointed out in other studies, this seems to be the result of better instruction, classroom interaction, and materials rather than differences in grading practices. In any event, these achievement results are positive from the TCCP program standpoint particularly because they represent adequate performance over a more heterogeneous population of students. The lack of difference in the major field grades is partially explained by competing with a reduced, more highly motivated group of students, and partially explained by the fact that TCCP students made a rather radical transition in moving from the program into the regular college experience. (This point is clearly demonstrated at a later point in this report dealing with continuing student perceptions of their education.)

In looking at the different group performance by sex, another potential program difference seems to lie at the highest levels of student achievement. In the TCCP group a notable number of men students perform at the top achievement levels as compared to the control

groups while the same is not true among the women students. Although not clearly documented, it has been argued that black women for historical reasons are more likely to assert themselves in academic circumstances than men. Given these present findings, it may be possible that part of this imbalance was due to the conditions surrounding the learning experience rather than the academic aspects themselves. It is true that in the TCCP program all students are expected to voice their views and opinions and challenge and debate the ideas of others, leading to study and research as a process of resolution of difference. These are important activities for which the students are rewarded. Under these conditions, it may be that the historical tendencies are somewhat nullified to allow the emergence of each individual to more nearly approximate his or her capacity. Whether or not this program structure explains student achievement remains to be more formally tested, but it is true, and will be demonstrated that the TCCP students, and noticeably the male students, did show leadership and non-academic achievement beyond the levels of the control groups.

Financing a College Education

Overall Characteristics. There are several points which provide the context for a discussion of financing the cost of an education in a predominantly black college. First, as has already been made apparent, the students largely come from poor families. In order to attend college at all, many of them have only the option of attending a college

within commuting distance from home or where the combined cost of fees for tuition, room and board is low. Second, because of the historical as well as present purpose of these colleges to provide a continuing educational alternative for black students, the cost to the student for his education must be kept low and the colleges must commit a large portion of their general fund to financial aid. Third, the colleges do not have the usual resources of most colleges; they have been, if public, less well funded by the states, or if private, by nature of the community they serve have much smaller endowments. Fourth, as with all institutions, they are presently caught in a wage-price spiral, with little hope of increasing revenues.

The result of this context is a vicious circle encompassing both student and institution. Because most sources of financial aid funds are federal (NDSL, Economic Opportunity Grants, etc.), the colleges must tie up operating funds in matching commitments while at the same time trying to provide education for more students due to increased financial aid. This means an increase in the teacher-student ratio and/or a decrease in other academic-related services. The students, who are the least able to pay for their education and in the greatest need for compensatory time and instruction, are faced with less academic help from the institutional standpoint and less time to study due to the need to work to support the remainder of the cost of their college education. This is compounded by the fact that obtaining jobs off-campus is extremely difficult; the neighborhoods are poor, and outside the neighborhoods discrimination is still an obvious reality. ISE's experience working in and with these colleges suggests that a large

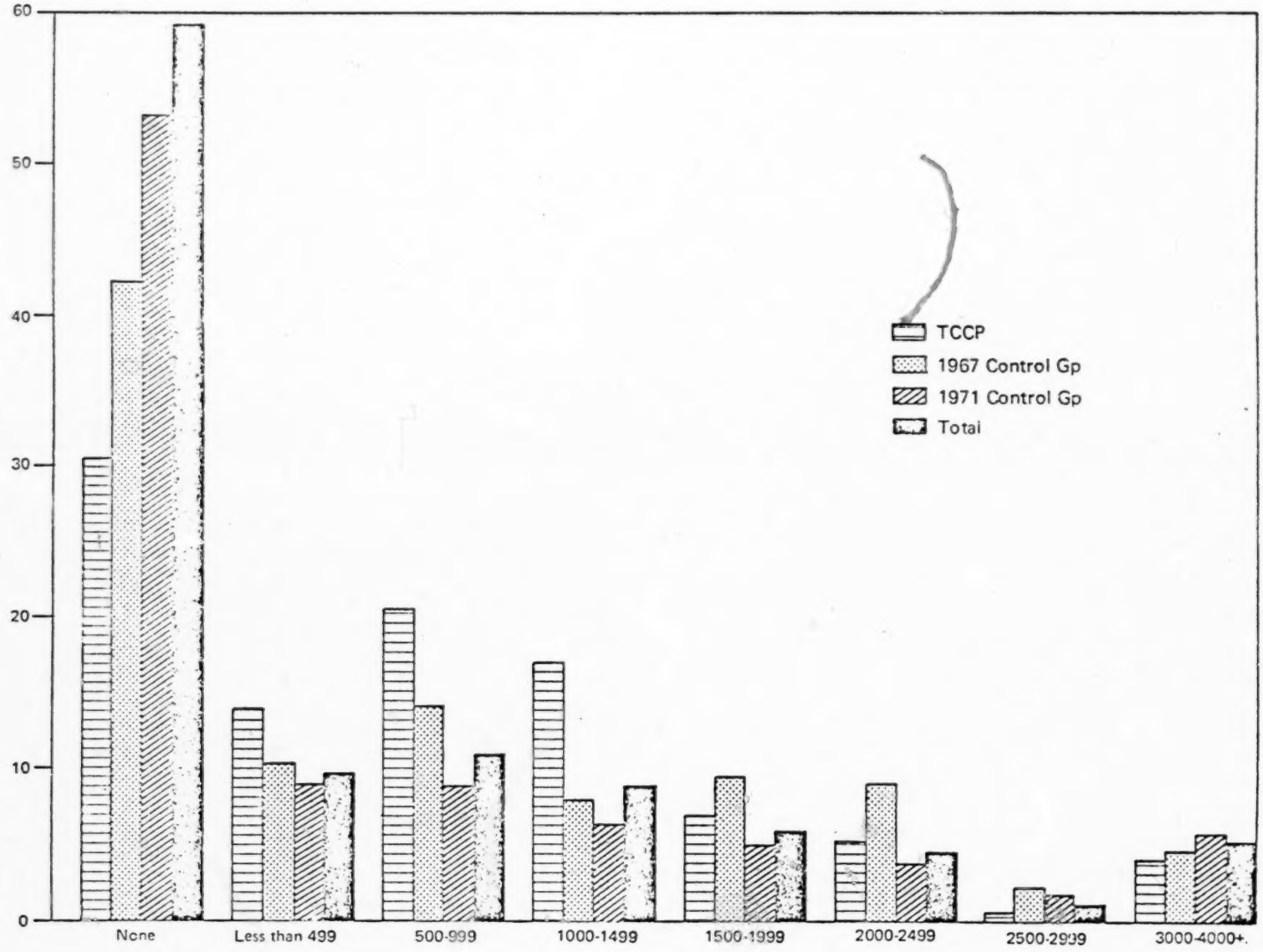

Figure VI. Percent of Students by Amount Borrowed from College –NDSL–

proportion of the "dropouts" can be explained in terms of financial causes.

Thus, for those students who survived to the senior year, an at least partially successful resolution of the financial crisis must be part of their background. More than 60 percent of the student worked to support themselves the summer before the senior year. More than 36 percent of the students worked during the freshman year and this number steadily increased to about two-thirds working in the senior year. It should be noted that the work figures are delimited by the number of available jobs (mostly on campus), and these jobs are usually preferentially given to proven upper-class students who need them to finish. In the case of those students who worked during the college year, the largest number worked about fifteen hours per week (not surprisingly because that is the limit provided for by the Federal Work-Study Program which is also based on the college matching principle), but many students ranged higher up to as many as forty hour work weeks. The amount of hours a student worked also increased between the freshman and senior years.

Figure VI shows the percentage of students by group according to the amount they borrowed from the National Defense Student Loan and other college loan funds. Slightly less than fifty percent of the students borrowed some money for the support of their education from these sources, and some students borrowed more than $3000. These figures would be higher except for the lower costs charged by the college in tuition, room, and board. As shown in Tables 26B-C in

the appendix, 25 percent of the student also borrowed funds from banks in support of their education and ten percent indicated loans from other sources.

Completing the financial package, students received money from home, from scholarships, and from economic opportunity grants. Given the level of family incomes, it seems surprising that about 70 percent of the students received more than 50 percent of their funds for college from home during their freshman year. While this support decreased both in the number of students receiving support and the amount of support supplied, more than 50 percent of the students were still receiving about 50 percent of their support from home in their senior year. Slightly more than one-fifth of the students received about 50 percent of their college support funds from scholarships and this figure remained relatively constant throughout college (most scholarships are renewable on the basis of certain performance levels). Slightly more than 10 percent of the student received about 40 percent of their college support through Economic Opportunity Grants and these figures also remained relatively constant throughout their college career.

The composite picture created by these financial arrangement is one of determination by the students and their families to continue and finish their undergraduate degrees. Of particular interest is the contribution of the family in support of the students' education. Given a median family income of less than $5000, it is hard to imagine the level of support in terms other than the concern of parents to see

their children better themselves. It is also clear that without the level of existing federal support, many of these students would probably not have been able to complete their degrees. However, it does seem illogical that these federal funds came at a cost to the students' educational program because of the matching necessities. Furthermore, all of this must be weighed against the fact that less than two-thirds of the students reached the senior year, many because of financial pressures and inadequate resources.

Comparative Results. From previously cited data, it is evident that the TCCP group came from poorer origins than did the other students, but due to a special arrangement with the Office of Economic Opportunity during the first two program year (1967-1968) these students were almost totally supported by special funds (tuition, room, and board). In the first two years of college, the two control groups fit the above picture, but the TCCP students primarily had to work only in the summers to support their education. On the average, about one-half of the TCCP students received a little less than 20 percent of their funds from home over their entire college career, but in most other ways the financial aid patterns were similar to the control groups during the junior and senior years, the difference being made up by a slightly higher rate of borrowing money from campus sources.

Part of the success of the TCCP in keeping these students in college must be creditied to the initial financial aid support. How much credit this support deserves in relation to the instruction and materials can

only be guessed at, but the reality of the problem of continuing student in college is largely faced in the freshman and sophomore years. Continuing ISE data on student attrition indicate that the dropout rate for program students is higher for following groups, but not as high as the regular college students. Given the nature of existing data, it appears that both a different instructional program and increased financial aid are necessary to keep the students in school. This means both an increased level of student financial support and college program support. One potential solution that works both ways is the removal of the matching stipulations on student aid funds.

Non-Academic Achievements

Overall Characteristics. By its heading, this section of the questionnaire appears to assess more than was actually the case. The students were not asked to describe open-endedly what their activities and achievements were in college, but rather to respond affirmatively to those preselected activities and achievements out of a list of 40 possibilities which pertained to them. The list included nine different areas of involvement: 1) student and college governance and leadership, 2) art, 3) community involvement and service, 4) writing and student publications, 5) drama and for[illegible] 6) music and dance, 7) science, 8) academic honors and recognition, and 9) athletics. There were not the same number of possibilities in each area, but each area moved from activities and achievements in which greater numbers potentially

could have participated to highly select or specialized possibilities (see the Tables under item 30A in the appendix). The results derived from the students responses, given the above conditions, serve to provide insight into two different questions: 1) what was the general level of involvement of the students in selected non-academic achievement areas, and 2) in what areas of non-academic achievement was there the greatest involvement, and conversely, the least involvement?

Based upon the students' responses, two areas of involvement clearly showed the greatest degree of student participation -- student and college governance and leadership, and community service and involvement. More than 25 percent of the students had served on a student committee and/or actively campaigned to elect another student to school office, and nearly 20 percent of the students held school offices and/or received an award for leadership. The single highest level of activity was in community service in which almost one-third of the students tutored other students (non-paid) and more than 25 percent of the students participated in a community group. The amount of academic honors and recognition of achievement was highly predictable on the basis of similarity in the manner by which colleges organize and manage these programs. Slightly less than 20 percent of the students participated in an honors or advanced study program, about 10 percent of the student were elected to an academic honor group or received special academic recognition, and less than 10 percent of the students were chosen for the collegiate "Who's Who".

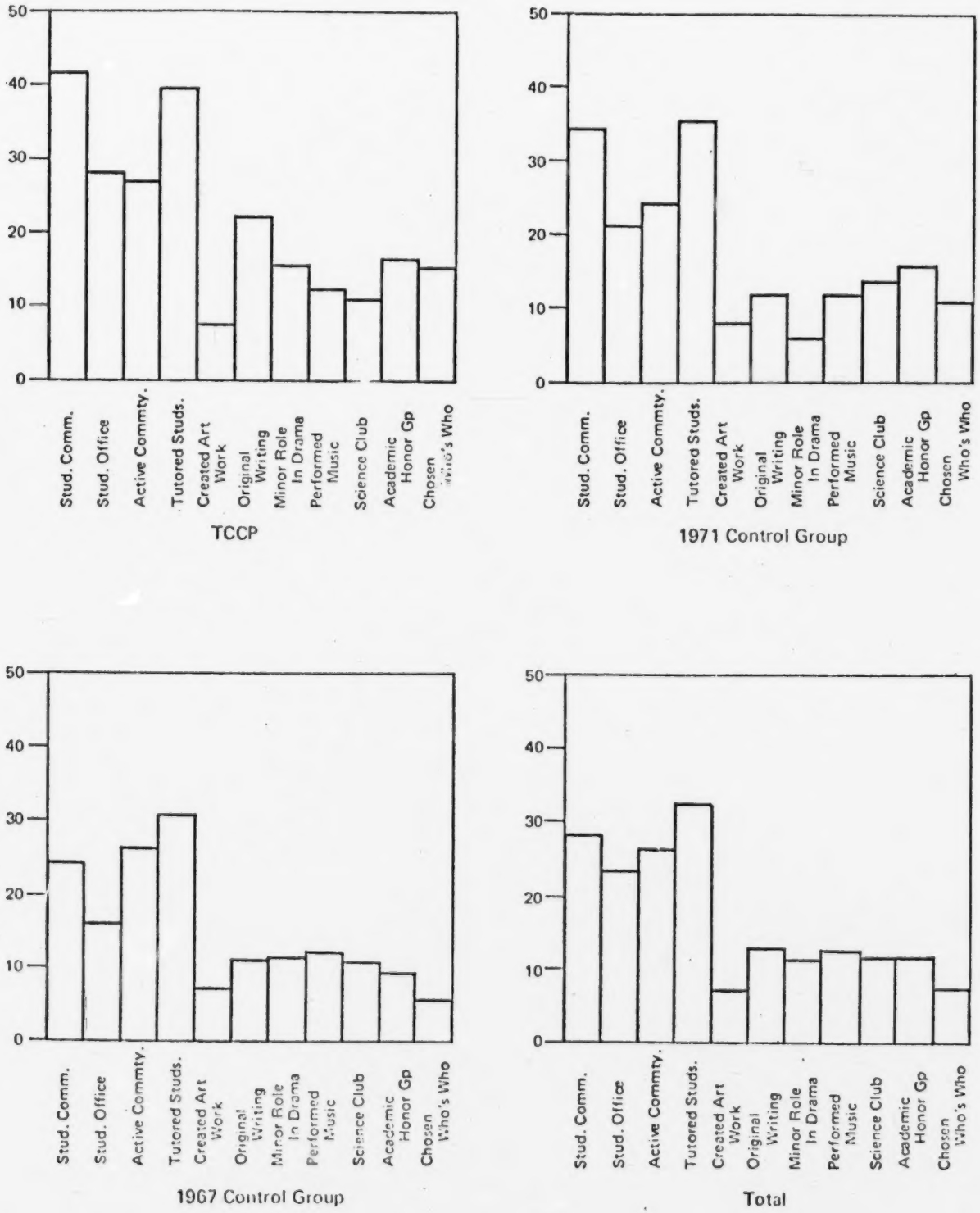

Figure VII. Percent of Students by Non-Academic Achievements

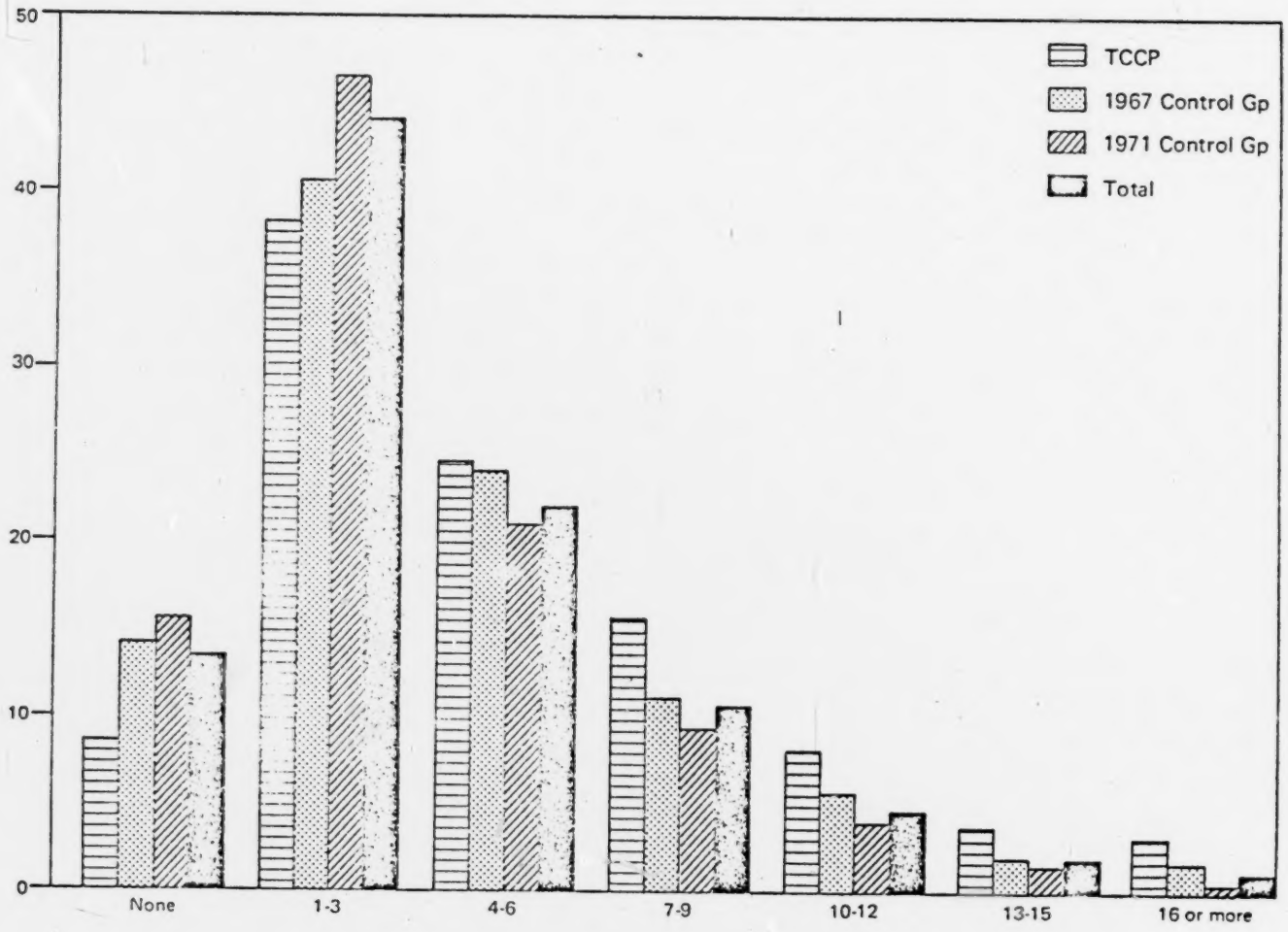

Figure VIII. Percent of Students by Number of Non-Academic Achievements

Much more highly selective was participation or recognition in the special interest areas of art, music, writing, drama, science, and athletics. With the exception of athletics which was limited to varsity participation and, not surprisingly, low in respondents, these areas included approximately 10 percent of the students at the broadest participatory level and little more than one percent at the most select levels. Of course, what was not determined by the students' responses was the degree or depth of participation in these areas, and in many cases, given their specialized nature, this was probably heavy. Figure VII shows the percent of students by total and by group who participated or achieved in selected possibilities across all of the areas except athletics. The graphed results exemplify the above generalization.

The amount of individual participation or achievement across all of the 40 possibilities is shown by percentage according to groups in Figure VIII. While only 14 percent of the students included no responses to the list of possibilities, the great majority of students were limited in their degree of participation or recognition. Almost 45 percent of the students responded to three or less items and an additional 22 percent responded to six or less items. Given the skewness of the distribution, however, it is clear that some students were very highly involved across a variety of areas. Again, it should be mentioned that the responses provided no indication of the level or amount of involvement.

These overall results appear to conform to at least two other areas of questionnaire data. The students' major areas of study indicated

relatively less academic involvement in science and arts and humanities, and relatively greater academic involvement in social science and education. This would seem to bear out the level of participation and recognition in such areas as art, drama, science, and music. In the area of writing, it does not seem too unfair to suggest that desire to engage in this area is largely undermined by freshman courses in expository writing with their over-abundant concern for standard form and grammar. The second area of correspondence is the relative amount of time beyond class attendance, studies, and financial survival which a student has available to engage in non-academic achievement areas. Given the work load many of the students have to carry, in combination with the low continuation rate over four years, the level of involvement is perhaps higher than one might expect.

Comparative Results. Table VIII clearly establishes that TCCP students were more heavily involved in non-academic areas. Part of this may be explained by the financial support provided in the first two years, but other data indicates that this involvement continued throughout their college careers. By examining Figure VII, it is clear that the higher level of participation was located in the areas of student and college governance and leadership, community service and involvement, writing, drama, and academic honors participation and recognition. These out-of-class areas of involvement are closely related to some of the in-class experiences the students had while participating in the TCCP program during the freshman and sophomore

years. Writing in program classes was not pursued, per se, from an expository standpoint, but rather as a part of broader ideas and expression. And in the same sense, drama (in the form of chamber theater) was introduced in the program classes as a means of expression encompassing a number of important mediums. Community activity and service was encouraged as both a means for testing ideas, and building bridges between experience and intellectual play (a part of the idea o 'relevance"). It is difficult to judge the degree to which the classroom model had an effect on the student involvement in college governance and leadership, but it is at least theoretically consistent that taking greater responsibility for the activity and conduct of the classroom in combination with the expectation of verbalizing and debating ideas in the classroom should transfer to some level of this activity outside of the classroom.

Satisfaction with College

Overall Results. This section of the questionnaire simply dealt with the students' summary views about their college experience. Did they enjoy attending the college? If they had the choice, would they attend the same college again? To what degree did they feel the college helped them toward important personal goals? More than 60 percent of the students felt that college had helped a great deal in achieving important personal goals, and all but six percent of the remaining students felt it helped somewhat. Enjoyment of college was less

clearly positive, but 48 percent of the students indicated a great deal and 46 percent indicated somewhat. The greatest level of ambivalence was related to their attendance at their college if they had the choice to make over again. Only 23 percent were definite about making the same choice again, but an additional 45 percent indicated they probably would make the same choice. On the negative side, 22 percent said they would probably not attend the same college again and 10 percent indicated they would definitely not attend the same college again.

In some ways, these results are related to who the students are and where they come from. Obviously for a large number of the students, improving their relative status is very important, and any college degree is a step in the right direction. It also seems obvious that the enjoyment factor is somewhat bounded by the personal sacrifice that surrounded many of the students continued attendance in college. Without attacking the "puritan ethic", a day filled only with study and work is limited in its enjoyment. The question of what college the students would attend if they had the choice again is difficult to interpret. Student attitudes about the structure of the college, which will be discussed in a later section, suggest that a number of students found the experience rigid. Some students were concerned about the direction and/or the quality of the curriculum, and other students were politically antagonistic toward the colleges. But on the whole, most students were at least somewhat positive generally, and in attitudinal areas.

Comparative Results. The responses to these questions were essentially the same across all the sub-groups, and although there were some comparative differences between the responses according to sex of the respondent, these differences were not pronounced and were unrelated to group.

Attitudes toward the Freshman Year

Overall Characteristics. The results encompassed in Tables 34A through 34P contain what, on the surface, appear to be some conflicting feelings about the students' initial experience in college. Given the fact that these students survived to the point of almost completing their undergraduate career, it might be expected that they would in varying degrees be positive about various aspects of that experience. Most students felt that their freshman year: provided an exciting view of teaching and learning (75 percent); confirmed that they could figure things out for themselves (90 percent) and do college-level work (84 percent); showed them the value of student questions (79 percent); and provided the basic study skills needed to continue (72 percent). At the same time, it seems an anomaly that almost two-thirds of the students felt the freshman year was rigid and impersonal and less than 25 percent would have had the rest of their college experience like that of their freshman year.

These results seem to suggest that the students, approaching graduation as they were, reflected backwards in a generally positive

way about themselves in relation to the experiences. But when confronted with non-personal characteristics of that experience (e.g. rigid and impersonal) or their willingness to have the experience repeated (rest of college like freshman year), they exhibit reservations which may be more closely in line with the actual nature of the experience. In general, the initial experience of beginning college usually seems to be difficult for students. Part of this difficulty must be simply the newness itself, and part certainly must be in the increased difficulty of the work required. On the other hand, the freshman experience in college is usually related to a number of other characteristics, which provide limited opportunity for the student to explore and to be rewarded for his efforts and ideas in relation to who he is and where he comes from. The pressure of competitive performance with his peers, of a singular, teacher-directed, didactic learning experience, and of a rather arbitrary set of requirements without regard to him personally must create a certain sense of punitiveness, the value of which lies mainly in creating a desire to avoid its repetition. Some students, such as these respondents, survive and continue; other students become disaffected and drop out; still other students find there is not enough reward to support their continued financial struggle. On the average, 25 percent or more of the students have made the decision to withdraw (or have been pushed to this decision) by the start of the second year of college.

Comparative Results. From ISE's standpoint, an absolutely critical question was whether a more positive, student-oriented program in the freshman year (and continuing partially throughout the sophomore year) would affect both the level of student withdrawal and the students' relative feelings about the quality and desirability of the experience. The strategy was to create a less static, more participative program for that initial experience. Based upon the accomplishment of that strategy, the results should demonstrate incremental differences in how the students perceived the experience and the degree to which they saw it as a mdoel for the continuing college experience. While it is now clear that the attrition rate was decreased, what additional evidence do these results provide about the program itself?

In general, the data support the idea that TCCP students did have a different, more positive freshman year. Figure IX shows the percentage of students by group at the various response levels concerning the freshman year as "rigid and impersonal; get it or else". While both control groups were similar, the TCCP students were decidedly less in agreement than the other students. Other results indicate that the TCCP students did have a substantially different, more participative experience, but the fact that almost half the TCCP students felt there was some truth to the statement demonstrates that the program, at that time, still had a long developmental period ahead.

Considerably fewer TCCP students than control students agreed that the freshman year taught them college was hard (49 percent as compared with 58 percent), and their concern was with surviving a boring year

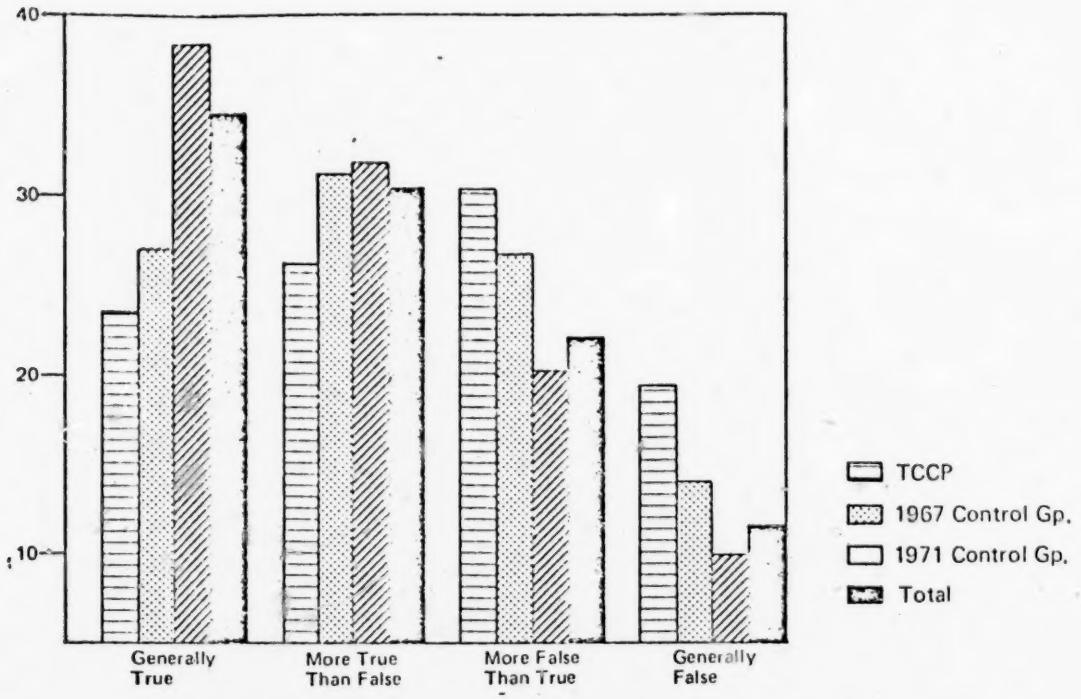

Figure IX. Percent of Students by Judgment of Freshman Year as Rigid, Impersonal

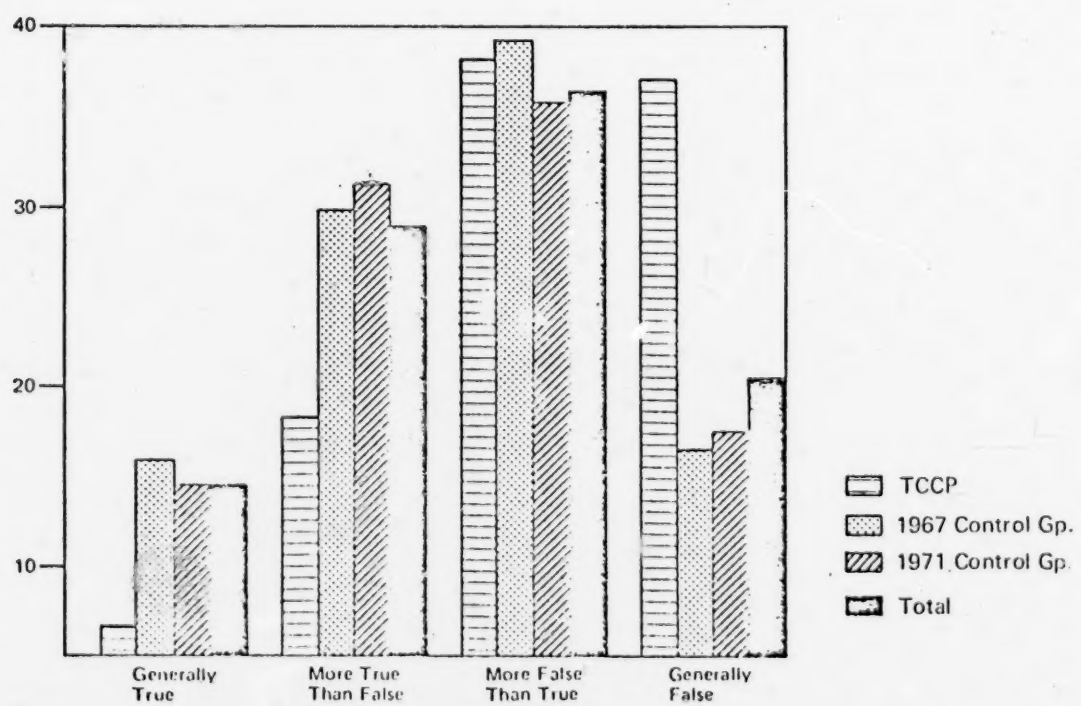

Figure X. Percent of Students in Response to the Freshman Year as not Encouraging Student Questions

(27 percent as compared to 40 percent), or that the experience almost destroyed their academic self-confidence (17 percent as compared to 29 percent). The TCCP students were more positive about generally positive areas; more TCCP students than control students on a percentage basis agreed that in the freshman year they found that they could do college-level work (19 percent as compared to 83 percent) and saw the value of student questions (90 percent as compared to 79 percent). One reason for this difference in the value of student question may have been the degree to which student questions were expected and encouraged in the classroom. Figure X shows the students' responses by groups to the statement, "Courses fell short of achieving the objectives of encouraging students to pose own questions and develop own viewpoints." Only 25 percent of the TCCP students indicated any agreement with this statement as compared to 45 percent of the control groups. The graphic respresentation clearly emphasized the differences.

Finally, it is clear that a much larger number of TCCP students than either of the control groups felt that their freshman year should have been a model for the rest of their college experience. More than 45 percent of the TCCP group to some degree agreed as compared to 21 percent of the control groups. While these results again emphasize that the program had a considerable distance to go to reach its objectives, they also emphasize that as compared to the regular college experiences a considerable distance had already been achieved.

Attitudes toward Counseling

Overall Characteristics. Until recently a well-supported counseling program in many black colleges did not exist; there simply was not the money to support positions peripheral to the classrooms and management of the institutions. With the increased flow of federal funds into higher education, counseling and student personnel services have appeared on most campuses -- but as functionally outside the academic area and usually more concerned with the management of problem students and administrative functions than with student personal and intellectual growth. More than 60 percent of the students had never met with a counselor in a personal growth-oriented small group setting. Less than 50 percent of the students had ever seen a counselor about personal problems, nearly the same percentage had never seen a counselor about financial, vocational, or academic concerns. Although nearly two-thirds of the students occasionally or frequently found a counselor helpful or felt that counselors were concerned with their problems, given the role of the counselor on the campus and the degree to which he actually provided support or service, these results appear more related to some preconceived idea about counseling than to the actual experience of counseling.

Comparative Results. As part of the original plan, the TCCP program included counseling as a central, unifying function. In observing the program in the early stages of its development it

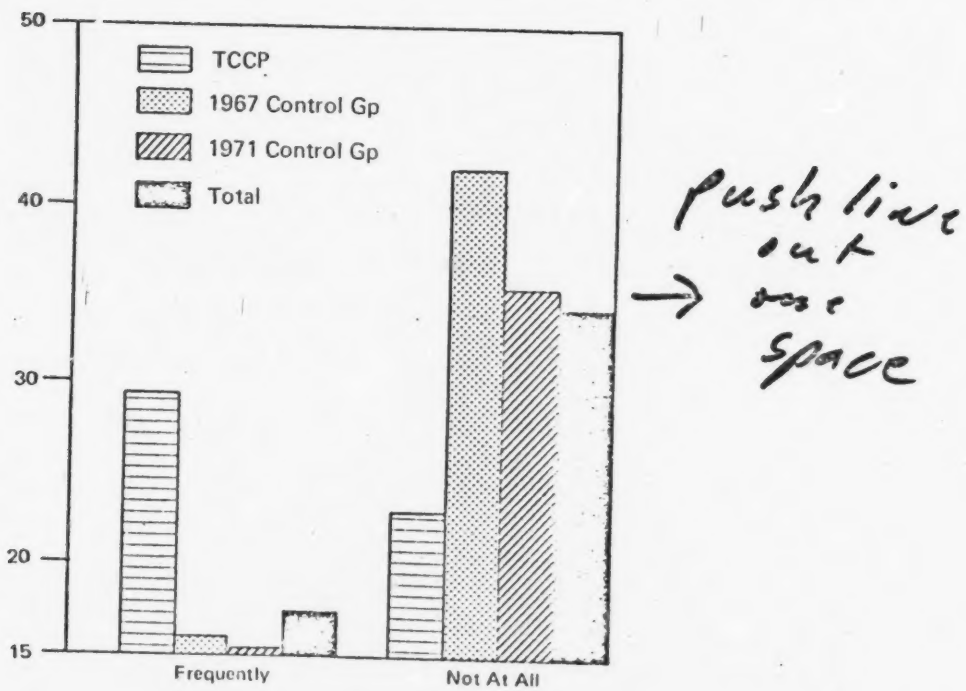

Figure XI. Percent of Students by Judgment of Counselor Concern for Students

became obvious that it would take time to more closely integrate counseling into the overall academic strategy. But from the start, the program students looked to the counselor as a central, clearly identifiable part of the program staff, and the comparative student attitudes tend to support these observation. More than 56 percent of the TCCP students saw the counselor occasionally or frequently about personal problems, as compared to 38 percent of the "1967" control group and 47 percent of the "1971" control group. The counselors in the program were urged to use the small groups setting with students and 52 percent of the TCCP students indicated that they had at least on occasion met with the counselor in that manner as compared to less than 36 percent of the students in the control groups.

While the program students did not use the counselor any more frequently than the control groups for academic or vocational purposes, they did more frequently use the counselor to help them with financial problems (69 percent as compared to less than 50 percent). Given the increased use of the counselor and the concomitant closer relationship with the counselor, it follows that more TCCP students found the counselor frequently helpful (26 percent as compared to about 12 percent), and felt counselors were frequently concerned with their problems (30 percent as compared to 16 percent). This latter attitude is graphically shown in Figure XI. These results, similar to those of the previous section, suggest that the counseling component at that time was more useful to the TCCP students than the regular college component, but that the need for continued improvement of the role and involvement of the counselor was also clearly present.

Continuing Attitudes toward Instructional Experience

Overall Characteristics. This section was composed of 59 statements about classroom conditions and interactions, and about student and faculty academic behavior. The following statements are illustrative:

-- Faculty members experimented with new methods of teaching.

-- Students spoke up in class.

-- Courses contributed signficantly to how I think about things today.

-- Teachers related course materials and discussion to areas of student interest.

-- Teachers were available to students after class.

-- The primary form of classroom instruction was the lecture.

-- Faculty members kept their courses and materials current with their field.

The senior respondents were asked to consider each of these statements as to their "truthfulness" (a four-point scale from generally true to generally false) in relation to their personal experiences during three periods of their college career -- the freshman year, the sophomore year, and the combined junior-senior years. In many ways, the data derived from this section of the questionnaire were considered to be the most important from the standpoint of comparing the different perceptions and attitudes of students over time based upon the type of program in which they participated during the first two years of college. Several critical hypotheses were the basis for interpreting the results in this section:

1) the perception of their classroom and instruction experiences would be similar for both the control groups across the three time periods;

2) the perceptions of all three groups of students would be similar during the junior-senior years as a result of their similar, combined program experience;

3) the TCCP group would demonstrate large, significant differences in perceptions when compared to the two control groups for the freshman experiences alone, and the exhibited differences would correspond to the type of educational experience around which the TCCP was planned;

4) as the TCCP group began to move out of the program experience into the regular college experience in the sophomore year the initial differences between the groups would decrease.

In effect, the hypotheses represented first, ISE's concern over whether the two control groups experiencing the same program perceived the program in a similar manner, even though there were some dissimilarities between the two groups in entering and background characteristics. This reflected a concern for the relative reliability of the student perceptions, as a precursor to discussion of results on the basis of differing program experience. The second major concern, based upon some minimal assumptions of reliability of the data, was the comparative trends of the TCCP group over the three periods in comparison to the control groups. It was anticipated that the TCCP students would be much more positive about their experiences at first, and that this would sharply decrease over the last two periods. The control groups were expected to be far less positive about their initial experience and increase slightly the degree of positiveness over the last two periods. The graphic result of these two different trends would represent a noticable interaction between type of program experience and chronological period of experience.

If these hypotheses were supported by the results, then there would be little basis for describing the results from an overall standpoint except, perhaps, in the junior-senior period when all students were combined in the same experience. For the most part the hypotheses were supported. The one exception, in fact, was even more supportive of the expected differences in the freshman experience. Instead of the TCCP students' perceptions being similar to the control students' in the junior-senior period, in many instances they were significantly more

Interpretation of Results

Starting with a statement bearing on a most general matter, below, on the left, is the statement; on the right, a graph giving the response. Throughout this report the responses shown represent only the first of four possible responses: namely, the percentage of students circling the response "Generally True." This format is the same for all subsequent graphs.

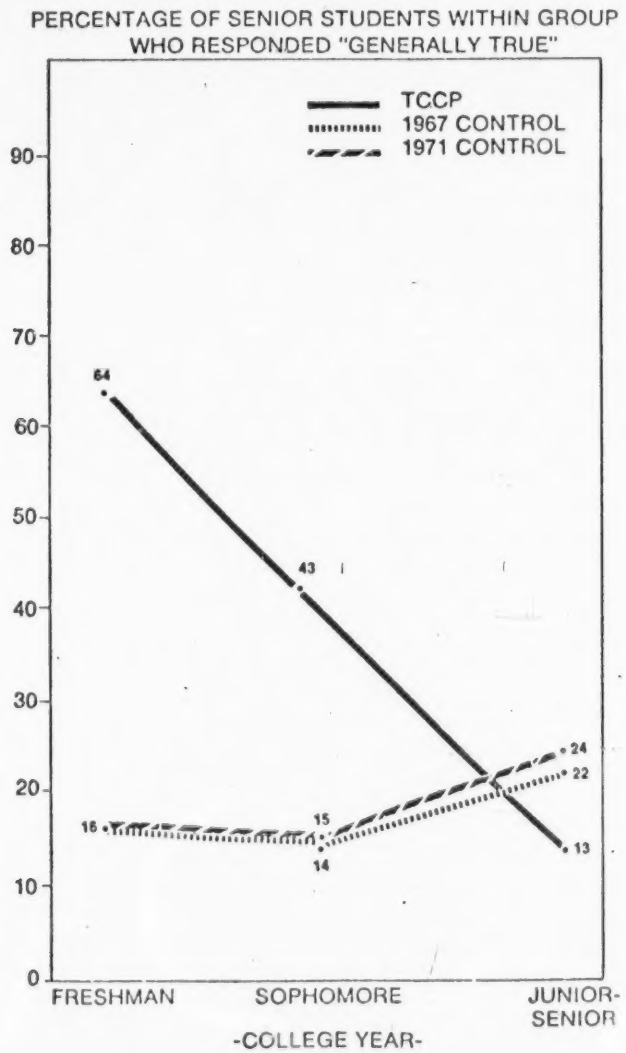

Figure XII.
Faculty members experimented with new methods of teaching

negative toward the latter experiences than the control groups. This "cross-over" effect (the logical extension of the interaction) might have been expected on the basis of initial perceptions as pre-conditioners of later perceptions. Thus, while the TCCP students experience essentially the same program as the control students in the junior-senior years, the fact of their having been exposed to a more participative, student-oriented, initial experience resulted in their interpretation of their later college experiences as less positive than that perceived by the control groups. Based upon these findings there are few grounds for providing an overall summary and so the discussion will move to a more detailed consideration of comparative differences.

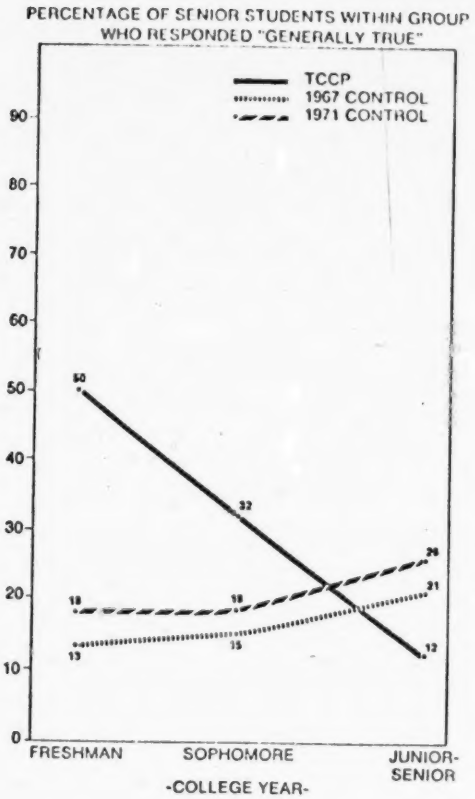

Figure XIV.
Teachers encouraged students to criticize course materials and teaching methods.

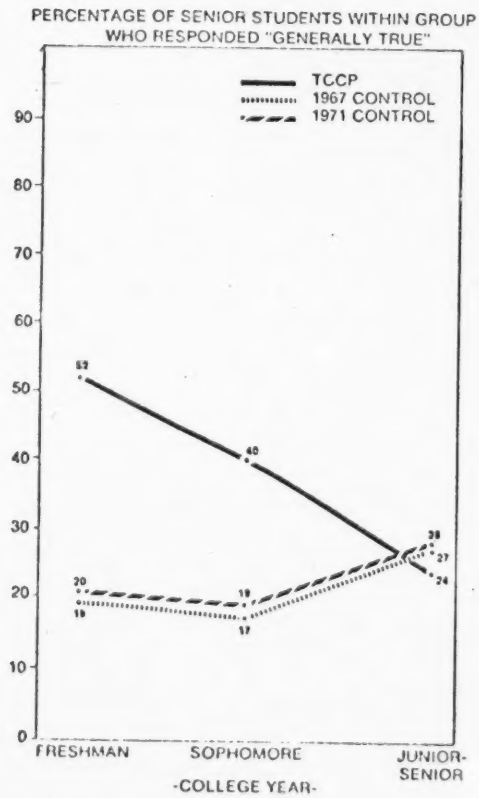

Figure XIII.
Students frequently continued discussion with their teachers outside of regular class periods.

The greatest differentiation between the TCCP and the regular program is in English and mathematics. This is not surprising since colleges are accustomed to laboratories in physics and biology, but not to studio-type activities in English or workshops in mathematics, nor to field trips in the social science. This difference in standard practice among the various fields of study is reflected in the regular program itself. Physics and Biology score higher than the other fields.[3]

The last statement to be cited in this report really bears less on the special characteristics of TCCP and more on how students viewed the educational achievement of the program -- achievement defined as making a contribution to how they view the world today.

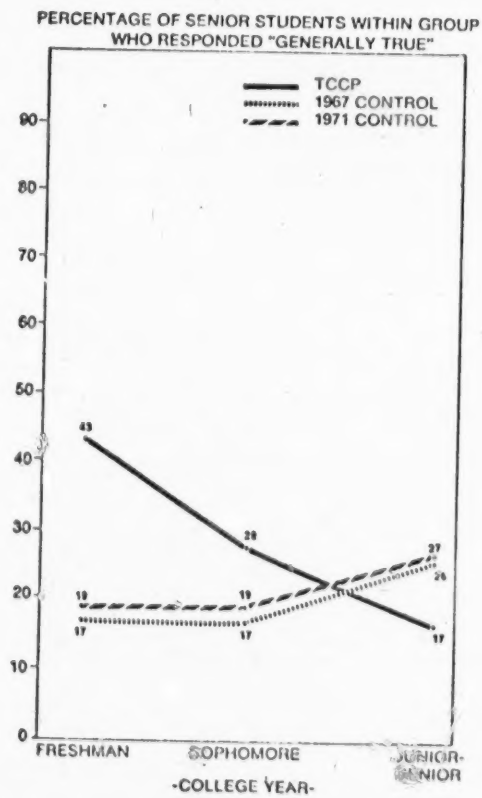

Figure V.
Courses contributed significantly to how I think about things today.

[3]There is a problem inherent in the data pertaining to specific course areas. Greater numbers of students for each of the three groups responded to items pertaining to specific course areas during the junior-senior year than there are majors in each of the areas. This may imply that the students have had elective experiences in the areas, but especially for the "hard" sciences, this conclusion seems unlikely. Possibly the respondents are generalizing either from their earlier experiences or are reporting on the experiences of their friends. There are no differences between the groups in terms of this problem and so it may be assumed that the trends are still representative.

Comparative Results. In a recent ISE publication (Toward More Active Learning: A Retrospective Look at the Thirteen-College Curriculum Program as Compared to the Regular College Experience, Turner, 1972) the results of this section are described and graphed in detail. The findings can be summarized briefly. Figures XII, XIII, XIV, and XV show the general pattern of the results for many of the statements, and correspond to the previous description of anticipated results. Each of the four selected statements associated with one of the figures represents a different type of concern, which as a package are symbolic of the major program thrusts. The comparative results for each statement represent both the differences between the groups and also the extent to which the TCCP program at that point in time had

reached its projected goal.

The statement represented in Figure XII is concerned with the degree to which faculty actually tried out different approaches and materials. This statement is representative of a number of statements in the section which get at type of materials, types of instructional approaches, and types of classroom management. The results demonstrated in Figure XII resemble those in other items of similar content. It is clear that the TCCP program was differently perceived by the students and that this perception probably pre-conditioned later perceptions of how a course should be taught. The results also indicate that almost two-thirds of the TCCP students perceived this important program component as having generally occurred.

The statement in Figure XIII represents a class of statements concerning the interpersonal nature of academic activity such as the relative closeness of the teacher to the students and the teacher's personal concern in teaching for student learning. Again the pattern of results is similar, although not quite as striking. The TCCP students did experience in the program a broader academic and closer interpersonal environment as compared to the regular college students. However, in the early stages of the program it is also clear that this qualitative area could be improved upon, as represented by only slightly more than one-half of the TCCP students indicating the statement to be generally true.

Figure XIV is based upon a statement representative of a class

of statements pertaining to the actual style of the teacher in the classroom. The results in this area are clear. The regular program was perceived as rigid and highly teacher-directed while the TCCP experience was much more readily perceived as interactive and student-oriented. However, in the initial implementation of the program, again the results indicate that the program could improve and that emphasis should be placed upon working with teachers in relation to their actual conduct of the classroom.

The statement in Figure XV represents a class of statements concerning the impact of courses and instruction on the students' frame of reference. It incorporates such ideas as "relevance" and "pertinence" in the selection and presentation of materials in college. There is an important difference between how the TCCP students saw the contribution of courses in the program as compared to the regular college students, and the "cross-over" effect is very striking. On the other hand, the results also emphasize how far both colleges and programs such as the TCCP have yet to go in developing this concept programmatically for students. While it is to some degree correct that some of the courses will take on increasing significance to the students as they grow older, this same argument is equally true for courses which the student felt were "relevant" at the time they experienced them. A primary concern for college should be the increase in human understanding and the development of closer congruence between experience and the interpretation (or meaning) of that experience. More recent evidence about the experiences of later

groups of students in the TCCP suggests that some headway is being made in this area, and that as teachers have continued to improve and develop new materials and to successfully implement them, the higher level of consistency which one would expect with use and practice has increased the number of positive student responses.

General Attitudes toward Higher Education

Overall Characteristics. The students' responses from all three groups to the statements in this section indicated a fairly high level of dissatisfaction with the content, conduct, and structure of their college experience, and their level of participation in that experience. These responses are somewhat atypical of what one might expect given both the students' southern background and their families' lower socio-economic status. Both of these characteristics usually result in quite conservative responses to the suggestion of educational changes or the suggestion of student dissatisfaction. Part of this tendency may be due to the increasing vocal criticism by young Blacks as a group of the social structures which surround them, and part may be attributable to the relatively rigid college environment they have experienced. In any event, it is clear from their responses that they would like to see some changes made in higher education.

A large majority of the students agreed that they should be allowed to participate in more institutional and educational decision (73 percent) and that undergraduates should have more responsibility for their education (84 percent). They felt they should be part of the evaluation

process used in judging teachers for promotion (76 percent), that students should have more equality to teachers in determining course content (73 percent), and that teachers should re-examine their courses every year (96 percent). They felt very strongly that their education would be improved if: 1) courses were more relevant (88 percent), 2) more attention were paid to students (81 percent), 3) credit for community service were provided (81 percent), and 4) the college was more deeply involved with the community around it (85 percent). On the other hand, the results were mixed about actual changes in the conduct of education. About 45 percent of the students felt college would be improved if all courses were elective, and about 60 percent of the student felt their education would be improved if grades were abolished. Slightly more than 60 percent of the students felt that the institution should be governed by students and faculty.

A much smaller number of students (about one-third) felt that admission standards should be raised, and only about the same number disagreed that remedial work should be conducted in the context of the regular classroom. More than 80 percent of the students felt that Blacks should control their own schools. In general, they felt the college did not have the right to control their lives off campus (75 percent), but 50 percent of the students felt the college had the right to clear student publications. However, the students felt more strongly about the right of the college to ban campus speakers (70 percent disagreed). Perhaps the most understandable student attitude was that a college education mostly just improves one's income (69 percent),

and while that should be a result of completing college, the results emphasize the need for the colleges to engage in internal reform of their educational program.

Comparative Results. Considering the extremity of the overall student response to many of the statements, there are not many significant differences between the three groups. The TCCP students appeared to be more liberal than the other students, but this was mostly in degree rather than in kind. TCCP students felt more strongly than the other groups that campus rules should not be allowed to extend to off-campus (86 percent as compared to 75 percent). More TCCP students also disagreed that the college had the right to clear student publications (60 percent as compared to 50 percent), or that colleges had the right to ban speakers on campus (83 percent as compared to 70 percent). Less than 25 percent of the TCCP students felt that colleges were too lax in suppressing protests as compared to 37 percent of the regular college students. The TCCP students were less extreme in either their agreement or disagreement concerning "college as mostly improving one's income." Almost three-fourths of the TCCP students held reservations about the statement (although leaning more toward agreement than disagreement) as compared to about 60 percent of the regular college students. This seems to reflect both their desire to improve their socio-economic position, but also their comparatively more positive feelings about the intrinsic value of their education.

Attitudes toward Black Colleges

Overall Characteristics. While the general goal of desegregation remains an important part of the young black college student's belief system, in some qualitative ways the term has taken on new meaning. In days past the idea of desegregation largely meant complete integration or becoming totally a part of white society with its implied equal treatment, justice, economic benefits, social organizations, and values. No longer is credence given to this broad an interpretation of the term. The students seem to be saying equal rights, equal opportunity, but not necessarily complete assimilation. And similar to their white counterparts in other institutions, traditional values are coming more and more under close scrutiny. The black student graduating from college in 1971 was not certain about the efficacy of the existing political structure, or the war-making capacity of the United States, or even the relevance of older black institutions in the modern support of black advancement. They generally felt that the education, instruction, and curricula at their colleges was as good as that found in white institutions in the area; that much of their education should focus on the black African experience; and that they would prefer attending institutions in which black students composed at least one-half or more of the enrollment.

There are, of course, some anomalies in this attitudinal profile. Given the number of areas of potential conflict in their belief system, it would not be unreasonable to expect more actual conflicting beliefs

than were present in the data. But then, these students have survived to achieve a status position far above the level of a majority of their peers, the result of which makes possible stronger integration of belief and greater self-justification of their own experience. This latter tendency is represented by three-fourths of the students agreeing, at least in part, that the quality of their education was as good as that found in white colleges in the area; 86 percent felt the teaching was as good, and 73 percent felt that the curricula was as good. However, fewer students (65 percent) were as sure that the education they received better fitted their needs than that which could be found in the area's white colleges.

In terms of the nature of their education, fewer students were willing to agree that black colleges should prepare students to live according to the values of a predominantly white society (52 percent), and a large majority of the students (82 percent) felt that college should focus on the experiences of the African people, especially in the social sciences and humanities. There was less clear feeling over the credibility of the white teacher in the black college for teaching social science and humanities. More than 45 percent of the students felt white teachers should not be hired to teach in those areas, but conversely, more than 50 percent of the students disagreed with that statement as a policy for hiring teachers. There was little disagreement (less than 20 percent) that black colleges should prepare students for jobs so that they could work for change from within the American system, but only about 55 percent of the students agreed that the

colleges should teach support rather than subversion of the existing political structures.

Like many college students throughout the country, the respondents to this questionnaire were doubtful about their fighting in a war to support the United States if they had free choice. And as other responses already cited suggest, they are leery of existing institutions, both black and white. Only 50 percent of the students felt that their college was more interested in supporting community groups working for black advancement than in having the approval of white people. Part of their attitudes reflect the strategy of debunking -- common among other college students and particularly endemic to the times and circumstances -- and part of their attitudes clearly include the anticipation of becoming a meaningful part of the larger society.

In terms of the racial composition of the "ideal" educational institution, more than 96 percent of the graduating seniors felt that black students should attend colleges where no less than one-half the students were black. Many of the students (70 percent) indicated preference for some integration of the college setting, but as qualified above -- 52 percent of the students desired to attend an institution in which "about half" of the students were black, 23 percent indicated "most," and 22 percent indicated "just about all." They also preferred in the specified "ideal" college setting at least half to a majority representation of black teachers (61 percent indicating "about half," 19 percent indicating "most," and 14 percent indicating "just about all").

Comparative Results. There were few significant differences between the three student groups concerning these attitudes. The TCCP students disagreed more strongly than the other students with the statement that black colleges should prepare students to live according to the values of a predominantly white society (38 percent of the TCCP group agreed with the statement as compared to about 50 percent of the control groups), but then this might have been expected considering the heavier imput of black studies materials into the TCCP curriculum. Similarly, the TCCP group had a larger proportion of students opposed to teaching support of existing political structure (31 percent of the TCCP group agreed with the statement as compared to 40 percent of the regular colleges students). They also were proportionally less in agreement with fighting in a war if they were allowed a free choice, and disagreed proportionately more often that their colleges were supporting black advancement. At the same time, however, the TCCP students were more strongly supportive of the notion that black students should attend black colleges than were the control groups. About one-third of the TCCP students indicated this was preferable to integrated or white college settings (as compared to percent in the control groups). They also emphasized greater numbers of black students and teachers in describing their ideal college setting than did students in the control groups.

Feelings of Control over Environment

Overall Characteristics. A number of underlying components are

in interaction in varying degrees across the items included in this section -- the ethic students bring with them to college including some degree of determination and some philosophy of work, the image the students have of themselves, the general psychological strength of the students, and certain expectations based upon past experience. In retrospect, the students were generally confident that they would graduate from college; 72 percent indicated that they were very certain they would graduate and 24 percent of the students felt they had at least a 50-50 chance of graduating. Part of this confidence must have been based in part upon expecting hard work to pay off; 71 percent either disagreed or disagreed strongly that luck was more important than hard work for success. They generally felt that despite any disadvantages they would get ahead; 69 percent of the students either disagreed or disagreed strongly with the idea that when they tried to get ahead, something or somebody would stop them. And most of the students indicated a general confidence in their ability to learn; 73 percent indicated disagreement or strong disagreement with the statement, "Sometimes I feel I just can't learn."

On the other hand, certain vestiges of past experience led most of the students to agree that getting ahead is as much a matter of who you know as what you know (79 percent either agreed or agreed strongly with that statement). Probably a combination of past experience and a certain remaining trace of insecurity underlie the lower proportion of disagreement with the statement, "I would do better in school if teachers did not go so

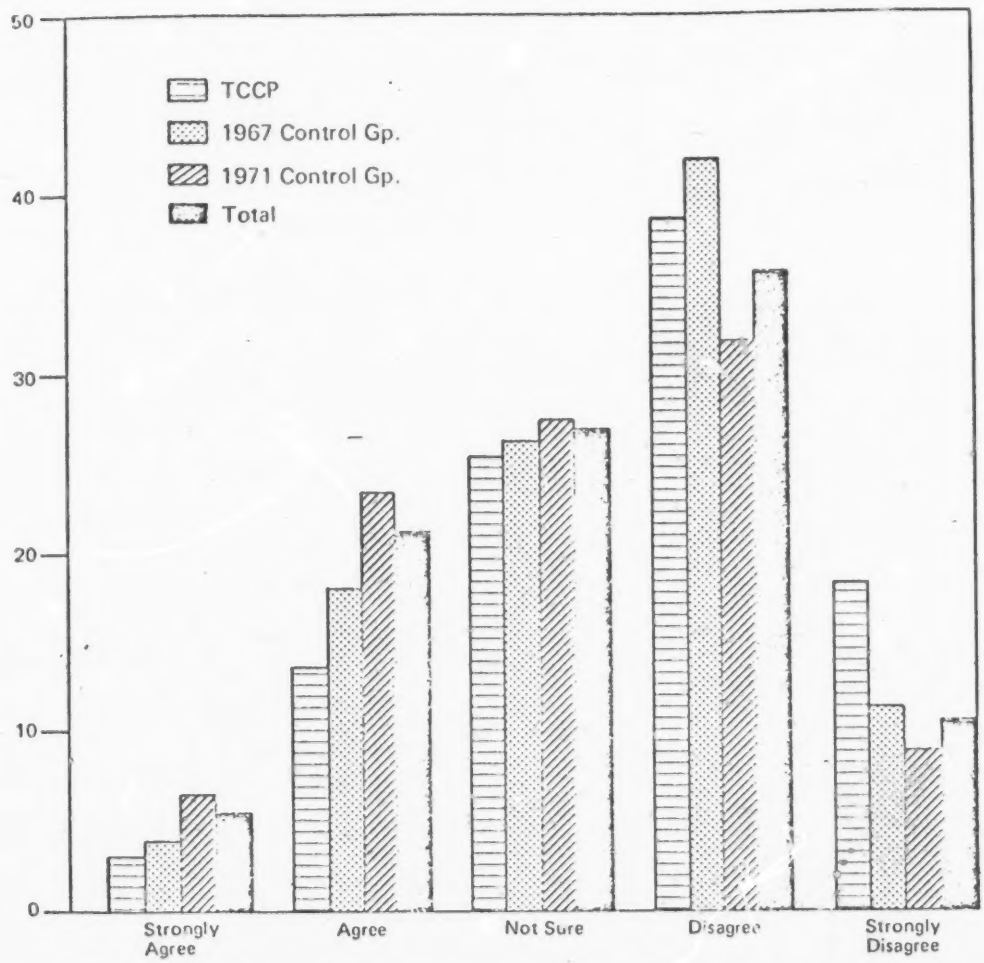

Figure XVI. Percent of Students by Opinion of Their Improvement in Academic Performance if Teachers Were to Go More Slowly

fast." In this case only 46 percent of the students disagreed or disagreed strongly. But on the whole, the students were mostly positive about themselves and their ability to deal with the circumstances they would encounter.

Comparative Results. All three of the students groups exhibited the same patterns of responses. For most of the items, the TCCP group was the most positive, followed by the "1967" control group, and then the

"1971" control group. Based upon other performance and achievement results, this order might have been expected; but only on two items are the differences significant and notable. On the item pertaining to doing better if teachers went slower (see Figure XVI), 57 percent of the TCCP students indicated disagreement as compared to 52 percent for the "1967" control group and 43 percent for the "1971" control group. The other item which resulted in a large significant difference was the statement, "When I try to get ahead something or somebody stops me." In this case, the TCCP group had 75 percent disagreement as compared to 70 percent for the "1967" control students and 66 percent for the "1971" control students.

Actual and Desired Student Role in College Policy

Overall Characteristics. The data in a previous section specified that many of the students felt the college experience should be less restrictive and they should be allowed greater participation in determining college policy. These results can be summarized into essentially three areas: a) a desire for less in loco parentis on the part of the college administration; b) a greater role in determining their own educational pathways; and c) more input into the institutional decision-making and policy formulation apparatus. Whereas many of the students agreed or agreed with reservation that their own college had taken steps to increase student participation in its decisions, they also felt strongly that their college officials did not have the right to regulate their off-campus behavior, or to ban speakers from campus and

to clear student publications. Most of the students agreed at least partially that undergraduates are mature enough to be given more responsiblity for their own education and that many really interested students drop out because they do not want to "play the game" or "beat the system." Finally, the students indicated an interest in such areas as playing a part in faculty promotional decisions, determination of course content, and institutional governance.

The purpose of this section of the questionnaire was to delineate more precisely the role students desired in the determination of different areas of college policy, and to contrast these desired roles with the actual roles students felt they had in those same policy areas. The different policy areas considered were:

-- faculty appointment and promotion
-- undergraduate admissions policy
-- provision for, and content of, undergraduate courses
-- student discipline
-- bachelor's degree requirements

For both the desired and the actual roles, the students responded to one of five levels of participation: 1) control, 2) voting power in committees, 3) formal consultation, 4) informal consultation, or 5) little or no role.

The results demonstrate that the students, at least by the senior year, desire a responsible role in determining policy in each of the five different areas, but that the level of participation desired

varies according to the area under consideration. In every case, a plurality of the students indicated a desire for voting privileges on policy committees. With the exception of student discipline, between 57 and 70 percent of the students desired either committee voting rights or formal consultation. As might be expected, the area showing the highest level of desired participation was student discipline -- 21 percent of the students desiring control over policy, 51 percent of the students desiring voting rights, and 19 percent desiring formal consultation. Less than 10 percent of the students desired only informal consultation or little role in policy-making. Following student discipline, the students indicated the next highest level of desired participation in policy decisions related to provision for, and content of, undergraduate courses. In this area, 12 percent of the students desired control, 4 percent desired voting rights, 27 percent desired formal consultation, and 18 percent desired only informal consultation or little role. For the remaining three areas, faculty appointment and promotion, admissions, and degree requirements -- traditional areas of faculty and administrative responsibility -- the pattern of responses was similar. Less than eight percent of the students desired control, slightly more than one-third desired voting rights, 20 to 30 percent desired informal consultation, another 15 percent desired informal consultation, and about 20 percent desired little or no role.

Contrasted with these desired roles, the students most frequently indicated that their actual role at their college in these areas was much less than that desired. In the three most traditional areas of

faculty and administrative control about 80 percent of the students indicated they had little or no role; the remaining students distributed themselves about equally across the other role categories. The students indicated they had slightly more involvement in provision for, and content of, undergraduate courses, but nowhere near as much as desired. About two-thirds of the students indicated little or no actual role, 15 percent of the students indicated some informal consultation, and the remaining 20 percent were distributed across the remaining three higher levels of involvement. Only in the area of student discipline did the desired role come close to approximating the actual role. Only one-third of the students indicated little or no role; an additional third indicated about equally either formal or informal consultation, 26 percent indicated that they had voting rights on policy committees, and six percent indicated they had control over student discipline. While these actual levels in no way reach the desired level, students do at least generally have some input into whatever form of due process for students each campus provides.

The last decade has been marked by a nation-wide movement on the part of students to increase their role in the general governance and policy-making of their colleges and universities. While the pressure exerted by students has in many cases met with resistance from the traditional sources of control, in general students have increased their responsble level of participation. Theoretically it makes sense from a learning standpoint to involve students at a higher level of policy, in order to

continue at an increased rate the types of individual decisions a student should make about the nature and extent of his participation across the potentialities of an increasingly complex society. From the perspective of students in this study it is clear that the black colleges represented by the data are not using their students as a decision-making resource to the extent that they could or to the extent that the students so desire.

Comparative Results. There are very few important differences between the three different student groups in response to these questions. Although several significant differences do occur, they provide no clear interpretive differences between the groups; for the most part the differences represent minor internal variations across the levels which add up to statistical significance but no meaningful differences.

Areas of Self Concept

Overall Characteristics. The notion of self concept is really an amalgamation of many different components; the components vary in content and importance according to such factors as past personal experience, idealized models of personality and behavior to which one would like to be favorably compared, traits and types of behavior which are highly valued by society or societal subgroups, direct performance which is measured and compared against some standard, and the relative congruence of a given self-concept area to the broader psyche. In this particular study the students were asked to rate themselves on a series of traits in relation to other seniors in their college. The

items ranged from "school achievement" -- which is bounded by the student's actual performance and grades, to "wanting to do things for others" -- a highly subjective area that might be rated on the basis of what one would prefer to be like, or on the basis of actual doing of things for others and being rewarded in some way for this behavior. In general, the less precise the trait is in either its definition or in its ability to be directly measured, the higher one is likely to rate oneself if the trait is seen as desirable or important, and conversely, the more clearly a trait can be defined and/or measured according to some standard, the greater the likelihood of one's self-rating corresonding to results of that definition or measurement. The results of the self concept ratings will be broadly discussed across five different categorical groups of items, followed by a brief discussion of differences attributable to the sex of the respondent.

First, the students are generally positive about themselves and their future. Across all of the items, most of the students rated themselves as average to above average. This was to be expected. The students have come a long way to reach graduation from college; many of them have made an enormous status move from poverty to some assurance of favorable occupation and position in life. The students are reasonably sure of themselves and reflect this in their ratings of self in relation to their certainty about their "identity." Only seven percent of the students felt they were below average on this dimension while 56 percnet of the students felt they were above average. This combination of generally favorable self ratings across the different areas and the implied certainty of self

"identity" has resulted in a very positive student projection of a successful future. In rating themselves on "chances for success in the future", only two percent of the students indicated below average as compared to almost two-thirds of the students rating themselves as above average. Of course, these projections were made at a time -- immediately before graduation -- when it might be expected to find a positive view of the future, but nevertheless they do reflect the overall positive affect that completing college has on these individuals.

A second important self concept area -- identified in previous ISE research reports as social-anxiety self concept -- suggests some qualification of the optimism and certainty students projected in the above results. Many of the studentsindicated a high need to be "understood" combined with a desire not to violate social norms, a characteristic which was present in these same students at the time of entrance to college four years earlier. More than 50 percent of the students rated themselves as above average on "wanting to be treated with understanding," 56 percent indicated above average on "wanting to do things for others," and 40 percent indicated they were above average on "wanting to do what is socially correct and following the rules." One-third of the students rated themselves above average in "wanting to be looked up to and admired," and 51 percent rated themselves as above average in "liking to be with others." Obviously, these self conceptions are not necessarily inappropriate on an individual basis; however, they do indicate that the students as a group feel a strong interdependence toward each other, a general desire to conform to social rules and standards, and a need for social approval.

The fact that these results are almost identical to those observed at the time these students entered college in 1967 (see Parmeter, 1970) suggests that the net effect of the college experience on this personality dimension for most students has been nil, a finding not unexpected on the basis of results of other longitudinal studies of higher education.

A third area of self concept involves the general presentation of self to others. The student self ratings in this area appear congruent to both the general optimism toward the future and the desire for social interdependence. In short, the students saw themselves as cheerful, even-tempered, accepting of others, dependable, and quite active. Only five percent of the students rated themselves below average on cheerfulness while 56 percent of the students rated themselves above average. One-half the students felt they were above average on "being even-tempered, easy-going" as compared to seven percent below average. The same pattern of responses applied to "dependability, completing tasks on time;" four percent of the students indicated below average and 56 percent indicated above average. Although not quite as strongly held, 41 percent of the students rated themselves above average on "accepting of people at face value," and 39 percent rated themselves above average on "activity, always on the go."

Given the relatively strong "other-directedness" evidenced in the above results, it would be expected that the students would be relatively lower in their self ratings of traits which are more representa-

tive of "inner-directedness" such as impulsiveness, working with abstract ideas, and being "tough-minded." The results confirm these expectations. Only 24 percent of the students rated themselves above average on "being tough-minded" while 19 percent rated themselves below average on this dimension. The same percentage of students (22 percent) rated themselves as either above or below average on being "interested more in abstract ideas than in practical ones." More than one-third of the students rated themselves below average on "willing to act without plan, on impulse" as compared to 21 percent rating themselves above average. Although the ratings on these items are not the inverse of those found in previously discussed areas they are noticeably lower in their distribution, and taken in the context of all of the self ratings are the lowest single area.

In examining the students' academic self concept and related attributes -- the last area covered in this summary of self concept results -- there appear to be several pertinent generalizations. First, the students tend to rate themselves more highly on less precise items than on parallel items which relate to specific course experiences or outcomes. For example, the tendency is for a student to rate himself more highly on how much he knows in an area, for example social science, than how good he is in the same area. Part of this phenomenon is probably due to traditional college grading practices in which "goodness" is related to where one falls on some normalized distribution on test results and grades, while "knowing" is a less measurable and comparative attribute based as much upon where one has moved from as upon general standards

for the field. Second, the students rated themselves most highly on those attributes which were not at all course-specific such as intelligence, school ability, and the ability to figure things out. Finally, there was a definite rank-order to the self concepts according to different academic areas. This order held true for both the academic performance related list and for the parallel, but less specific, "knowing" list in the area of English and lowest in the area of natural science; comparably the students rated themselves highest on their ability to express ideas and vocabulary and lowest on their knowledge of biological and physical science. Much of this ordering is explained by self-attitudes the students brought with them to college from their high school experiences, but other parts of this finding may well be related to the following: 1) across colleges in general, math and science are considered "hard" subjects and English and social science are considered "soft" subjects, and 2) the rank ordering follows the relative appearance of preciseness in the measurement of learning in the subject areas. This latter explanation, of course, appears more creditable on the surface than it deserves; while the final outcome of an educational experience may appear more precisely measured at the end of the science course than the English course, this begs the question of what a student learned in the course or to his ability to apply or generalize to other areas what he has learned in the course.

Table III shows the collapsed student self ratings in academically-related areas or traits. General characteristics are listed first, followed

Table III

STUDENT ACADEMIC-RELATED SELF CONCEPT RATINGS IN PERCENTAGES

	Below Average	Average	Above Average
Intelligence	3	39	58
Your ability to figure things out	2	44	54
School ability	3	47	50
Your ability to generate new ideas	4	50	46
School Achievement	5	57	38
How well you express ideas	5	52	43
Vocabulary	9	60	31
How well you think in quantitative and analytical terms	8	61	31
How much you know of "Black studies" -- Black history, literature, art, ... etc.	20	51	29
How much you know about social institutions; their nature and change	11	61	28
How philosophic are you	14	58	28
How much you know about yours and others cultures ...	17	59	24
How much you know about biological science	22	60	18
How much you know about physical science	30	55	15
How good are you in English	7	54	39
How good are you in social science	8	58	34
How good are you in humanities	12	58	30
How good are you in math	22	52	26
How good are you in natural science	15	62	23
How good are you in philosophy	19	58	23

by the non-performance but course-related list, and then the course performance-related list. The student ratings have been collapsed so that the below average category represents both the very below average and the below average responses, and the above average category includes both the very above average and above average responses.

There are some noticeable differences in the self ratings across all of the areas attributable to the sex of the respondent. Men students tended to rate themselves higher on school ability, most course-related areas (with the exception of English in which the women students rate themselves more highly), and traits associated with academic skill and performance such as figuring things out and generating ideas. The men also rate themselves more highly than the women on "chances for success in the future." The women students tended to rate themselves higher than the men on such areas as time spent in studying, dependability, social-anxiety traits, and traits related to the general presentation of self to others.

Comparative Results. The patterns of responses for the self concept areas described in the previous section generally hold true for all three groups of students. However, across the different groups there are some noticeable as well as significant differences on some items. Academically, the TCCP group is significantly higher in self ratings of social science, philosophy, humanities, and black studies. However, the 1971 Control group shows significantly higher ratings on figuring things out, ability to carry out ideas, and chances for success in the future. The TCCP

group is significantly lower in the self rating of social-anxiety traits such as following the rules, need for understanding, doing things for others, liking to be with others, and accepting others at face value. The TCCP group also had significantly lower self ratings in wanting to lead and liking to be seen and to speak in public.

From a program standpoint, these resulting differences are somewhat positive and appear to relate to desired program effects. First, the TCCP students felt more competent in areas where the program had introduced relatively unique courses of study and participation (e.g., humanities, philosophy, and black studies). Whereas most students had been exposed to some language, math, social science, and natural science, and had survived, the regular students did not necessarily have as much exposure in the areas where the differences appeared. The other positive interpretaiton is an indication of greater "inner-directiveness" on the part of the program students in the sense of a less high need for social support and conforming to social norms. The program was based on the idea that by more actively involving the student in his education and promoting a learning model based upon organizing, presenting, and debating ideas, the student would become more self-reliant and confident about his own decisions. It is also clear that while the students rated themselves lower on this social-anxiety area, they were also much more active in school and community programs and leadership (see the comparative non-academic achievement results). This difference between being involved and needing social support seems an important distinction.

Attitudes Toward the Questionnaire

Overall Characteristics. While the questionnaire was not universally perceived as "interesting" by the students (considering the more than 400 items this is understandable), they did indicate that in general they completed it carefully, that their responses to factual items were usually accurate, that most of their views would be similar the following month, and that they would not have answered differently if they had not been requested to identify themselves for follow-up purposes. Specifically, the data show the following results. Almost three-quarters of the students agreed or agreed with reservations that the questionnaire covered all of the important aspects of their college experience. Slightly more than 70 percent of the students felt the questionnaire was interesting, but this total included 34 percent who agreed but had reservations. More than 80 percent of the students indicated that they had filled out the questionnaire carefully, and all but three percent of the students indicated general accuracy in relation to factual items. More than 57 percent of the students agreed fully that their views would be the same the following month and an additional 35 percent of the students agreed with reservations. Almost two-thirds of the students fully disagreed with the statement thaty they would have filled the questionnaire out differently if they had not been asked to identify themselves, and another 18 percent disagreed with reservations.

Comparative Results. There are some significant differences between the three groups in how they responded to the questionnaire, but actual

percentage differences are not great. In general, the TCCP students indicated the greatest care in filling out the questionnaire, found it generally more interesting than the control groups, and indicated more certainty that their responses would be similar the following month. However, the differences are mainly between the unequivocable response category and the response "with reservation." The direction of the results when these two categories are collapsed is not changed.

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Interpretation of Tables

The following tables, numbered sequentially from 1 to 183, are ordered according to the previous presentation of results rather than according to the order followed in the questionnaire. Some of the tables have a series of sub-parts reflecting interrelated items; these sub-parts are usually denoted by a continuation of the same identifying number followed by an alphabetically-ordered letter indicator (e.g., 107A, 107B, 107C,...107G). Each table is headed by a statement which resembles as closely as possible the actual question asked and each of the multiple-choice levels of response is also stated as closely as possible to the actual choice. However, the amount of space available for these statements was limited and in some cases the reader may wish to refer to the exact phrasing of an item in the actual questionnaire which follows the tables.

Each table includes three primary blocks of data, one for all men students, one for all women students, and one for all of the students combined. Within each block of data, the responses are shown (by percentage responding at each level) for each of the groups of students and according to the total responses across the groups. The groups are identified as TCCP (Thirteen-College Curriculum Program students), Control (the 1967 "control" students who participated in the regular college programs), and Other (the 1971 "control" students who participated in the regular college program, but who were not the subjects of previous ISE assessments). The total number of subjects responding to a given item across any of the subgroups is shown directly below the column of percentages for each subgroup and total.

In addition to the percentage presentation of results, each of the three blocks of data within a given table is tested by the chi square (X^2) statistic. The resulting chi square and its associated degrees of freedom (DF) are shown directly below each block of data. The chi square statistic is a non-parametric test of whether differences observed between groups at various response levels are large enough or consistent enough to be considered "real" differences ("real" in this case refers to the level of confidence one has that the observed results were not caused by some chance error such as might be obtained by poor sampling procedures). To interpret the chi square, the reader should compare the number shown below a block of data on a given table of interest to the values shown in the table below. Note that the table below has a column called "Degrees of Freedom," a column headed by "$p < .05$," and a column headed by "$p < .01$." The term degrees of freedom represents the number of cells in the contingency table from which the chi square was computed (technically the number of columns minus one times the number of rows minus one). The terms "$p < .05$" and "$p < .01$" represent the critical values which the chi square must reach in order to be confident that the results would happen by chance less than five times in 100 for the former (.05) and less than once in 100 times for the latter (.01). The less chance the results have of occurring by accident, the greater confidence one has that they represent real differences.

Note the size of the chi square shown below the table and its related degrees of freedom (DF), then look at the values shown below for the same number of degrees of freedom. If the value of the chi square from the table is greater than the one shown below, the results are significant

at the level of the corresponding column identification. It is possible that some results may be significant at the .05 level but not at the .01 level. This means that the results are probably "real" but that one would have less confidence in them than if they had occurred at the .01 level or more (it also usually means that the differences are not as great and may be more difficult to interpret). If the resulting chi square does not reach the critical levels, one can say with some confidence that there are no "real" differences between the groups on that dimension.

SIGNIFICANT CHI SQUARE VALUES*

Degrees of Freedom	$p \leq .05$	$p \leq .01$
2	5.99	9.21
4	9.48	13.28
6	12.59	16.81
8	15.51	20.09
10	18.31	23.29
12	21.03	26.21
14	23.68	29.14
16	26.29	32.00
18	28.87	34.81

*From William M. Meredith, Basic Mathematical and Statistical Tables for Psychology and Education, New York: McGraw-Hill, 1967, p. 247.